

UNIVERSAL
LIBRARY

OU_158334

UNIVERSAL
LIBRARY

OSMANIA UNIVERSITY LIBRARY

Call No. 337.054/5-120 Accession No. 12099

Author: Indian Tariff Board

Title: Report... protection to the oil indust

This book should be returned on or before the date last marked below.

REPORT
OF THE
Indian Tariff Board
REGARDING THE
GRANT OF PROTECTION
TO THE
OIL INDUSTRY.



CALCUTTA: GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1928

**Government of India Publications are obtainable from the Government of
India Central Publication Branch, 3, Government Place, West,
Calcutta, and from the following Agents :—**

EUROPE.

OFFICE OF THE HIGH COMMISSIONER FOR INDIA, 42, GROSVENOR GARDENS, LONDON, S. W. 1
And at all Booksellers.

INDIA AND CEYLON : Provincial Book Depots.

MADRAS :—Office of the Superintendent, Government Press, Mount Road, Madras.
BOMBAY :—Superintendent, Government Book Depot, Town Hall, Bombay.
SIND :—Library attached to the Office of the Commissioner in Sind, Karachi.
BENGAL :—Office of the Bengal Secretariat Book Depot, Writers' Buildings, Room No. 1, Ground Floor, Calcutta.
UNITED PROVINCES OF AGRA AND OUDH :—Office of the Superintendent of Government Press, United Provinces of Agra and Oudh, Allahabad.
PUNJAB :—Office of the Superintendent, Government Printing, Punjab, Lahore.
BURMA :—Office of the Superintendent, Government Printing, Burma, Rangoon.
CENTRAL PROVINCES AND BERAR :—Superintendent, Government Printing, Central Provinces, Nagpur.
ASSAM :—Office of the Superintendent, Assam Secretariat Press, Shillong.
BIHAR AND ORISSA :—Office of the Superintendent, Government Printing, Bihar and Orissa, P. O. Gulzarbagh, Patna.
COORG :—Office of the Chief Commissioner of Coorg, Bangalore.
NORTH-WEST FRONTIER PROVINCE :—Office of the Manager, Government Printing and Stationery, Peshawar.

Thacker, Spink & Co., Calcutta and Simla.
W. Newman & Co., Ltd., Calcutta.
E. Cambray & Co., Calcutta.
S. K. Lahiri & Co., Calcutta.
The Indian School Supply Depot, 309, Bow Bazar Street, Calcutta, and 226, Nawabpur, Dacca.
Butterworth & Co. (India), Ltd., Calcutta.
Rai M. C. Sarcar Bahadur & Sons, 90-2A, Harrison Road, Calcutta.
Standard Literature Company, Limited, Calcutta.
Association Press, Calcutta.
Chukerverty Chatterjee & Co., Ltd, 13, College Square, Calcutta.
The Book Company, Calcutta.
James Murray & Co., 12, Government Place, Calcutta. (For Meteorological Publications only).
Ray Chaudhury & Co., 68-5, Ashutosh Mukerji Road, Calcutta.
The Oriental Publishing House, 34, Cornwallis Street, Calcutta.
Scientific Publishing Co., 9, Taltola Lane, Calcutta.
B. C. Basak, Esq., Proprietor, Albert Library, Dacca.
Mitra Brothers, Rajshahi.
Higginbothams, Madras.
P. R. Rama Iyer & Co., Madras.
Rochouse & Sons, Madras.
G. A. Natson & Co., Publishers, George Town, Madras.
Theosophical Publishing House, Adyar, Madras.
Bright & Co., Trivandrum.
The Booklover's Resort, Taikad, Trivandrum, South India.
E. M. Gopalakrishna Kone, Pudumandapani, Madura.
Vijapur & Co., Vizagapatam.
Thacker & Co., Ltd., Bombay.
D. B. Taraporevala, Sons & Co., Bombay.
Sunder Pandurang, Bombay.
Ram Chandra Govind & Sons, Kalbadevi Road, Bombay.
N. M. Tripathi & Co., Booksellers, Princess Street, Kalbadevi Road, Bombay.
Proprietor, New Kitabkhana, Poona.
The Manager, Oriental Book Supplying Agency, 15, Shukrawar, Poona City.
R. S. Gondhalekar's Book Depot, Publisher and Bookseller, Budhwar Chawk, Poona City.
Rama Krishna Bros., Opposite Viharabag, Poona City.
Mangaldas & Sons, Booksellers and Publishers, Bhaga Talao, Surat.
Mrs. Radhabai Atmaram Sagoo, Kalbadevi Road, Bombay.
Pustakalaya Sahayak Sahakari Mandal, Ltd., Baroda.
A. H. Wheeler & Co., Allahabad, Calcutta and Bombay,

R. B. Unadikar & Co., The Bharat Book Depot, Dharwar.
The Standard Bookstall, Karachi, Quetta, Delhi, Murree and Rawalpindi.
The Karachi Book Depot, Elphinstone Street, Camp, Karachi.
The English Bookstall, Karachi.
The Standard Bookstall, Quetta.
U. P. Malhotra & Co., Quetta.
J. Ray & Sons, 43 K. & L., Edwardes Road, Rawalpindi and Murree.
The Standard Book Depot, Lahore, Lucknow, Nainital, Mussoorie, Dalhousie, Ambala Cantonment and Delhi.
N. B. Mathur, Supdt., Nazir Kanun Hind Press, Allahabad.
The North India Christian Tract and Book Society, 18, Olive Road, Allahabad.
Ram Dayal Agarwala, 184, Katra, Allahabad.
Manager, Newal Kishore Press, Lucknow.
The Upper India Publishing House, Ltd., 41, Amlinabad Park, Lucknow.
Rai Sahib M. Gulab Singh & Sons, Mufid-i-Am Press, Lahore and Allahabad.
Rama Krishna & Sons, Booksellers, Anarkali, Lahore.
Puri Brothers, Booksellers and Publishers, Katcheri Road, Lahore.
The Insurance Publicity Co., Ltd., Lahore.
The Tilak School Bookshop, Lahore.
The Standard Bookstall, Lahore.
The Proprietors, Punjab Sanskrit Book Depot, Saldmitha Street, Lahore.
The Punjab Religious Book Society, Lahore.
Manager of the Imperial Book Depot, 63, Chandni Chowk Street, Delhi.
The Indian Army Book Depot, Juhl, Cawnpore.
Oxford Book and Stationery Company, Delhi.
Supdt., American Baptist Mission Press, Rangoon.
Proprietor, Rangoon Times Press, Rangoon.
The Modern Publishing House, Ltd., 30, Phayre Street, Rangoon.
Burma Book Club, Ltd., Rangoon.
Manager, The "Hitavada," Nagpur.
Bhalsey Brothers, Booksellers and Stationers, Sitabaldi, Nagpur.
S. C. Talukdar, Proprietor, Students & Co., Cooch Behar.
The Manager, Ceylon Observer, Colombo.
The Manager, The Indian Book Shop, Benares City.
The Srivilliputtur Co-operative Trading Union, Ltd., Srivilliputtur (Satar, S. I. B.).
The Students' Emporium, Patna.
Raghunath Prasad & Sons, Patna City.
K. L. Mathur & Bros., Guzri, Patna City.
Dandekar Brothers, Indore City.
The Hyderabad Book Depot, Chaderghat, Hyderabad (Deccan).

TABLE OF CONTENTS.

Majority Report.

PARA.	PRELIMINARY.	PAGE.
1.	Terms of reference	v
2.	Board's communiqué	vi
3.	Applications received	viii
4.	Other representations	ix
5.	Acknowledgments	x
CHAPTER I.—THE INDIAN OIL INDUSTRY.		
1.	Areas of petroleum production	1
2.	Singu and Yenangyat	1
3.	Minbu field	1
4.	Indaw field	2
5.	Thayetmyo oilfields	2
6.	Gas conservation	2
7.	Competitive drilling	3
8.	The pipe line	3
9.	The refining process	4
10.	Indian Companies	4
11.	Relation of different companies	5
12.	Two groups of companies	5
13.	The Burmah Oil Company	6
14.	Financial progress	7
15.	Indo-Burma Petroleum Company	8
16.	Attock Oil Company	9
17.	British Burmah Petroleum Company	9
18.	Assam Oil Company	10
CHAPTER II.—THE KEROSENE POOL ORIGIN OF PRICE WAR: FIRST TERM OF REFERENCE.		
19.	The Kerosene Pool	11
20.	Principles of Kerosene Pool	11
21.	Price received by Pool	12
22.	Pool's control of prices	12
23.	The price war	12
24.	Causes of the war	13
25.	Attitude of Indian companies	14
26.	Consideration for Indian companies' support	14
27.	World parity	16
28.	Current Gulf f.o.b. price taken as world parity	16
29.	Price figures	16
30.	Equivalent of world parity at Indian ports	17
31.	Adjustments	17
32.	Another view of equivalent of world parity	18
33.	This view of world parity considered	19
34.	Possibility of changes in supply or world marketing conditions	19
35.	World parity at Indian ports not necessarily a fair selling price	20
36.	Current prices	21

CHAPTER III.—SECOND TERM OF REFERENCE.	
PARA.	PAGE.
37. Second term of reference	22
38. National interest in Oil industry	22
39. Method of examination	23
40. Indo-Burma Petroleum Company	23
41. Accounts for 1927	24
42. Adjustments in prices	25
43. Other adjustments	25
44. Strength of Company's financial position	26
45. British Burmah Petroleum Company	26
46. Appropriations to sinking funds	27
47. Debit balance	27
48. Adjustments	28
49. Extent of Company's resources	28
50. Liquid assets	29
51. Present financial position of Company	29
52. Position of British Burmah Petroleum Company compared with Indo-Burma Petroleum Company	30
53. Economies	30
54. Results of economies	31
55. The Attock Oil Company	31
56. Effect of reduction in prices	32
57. Estimated profits	33
58. Position of Company	34
59. Government's attention drawn to railway rates	34
60. Assam Oil Company	35
61. Relation of Company with Burmah Oil Company	35
62. Hessford Development Syndicate	36
63. Other Companies	37
64. Variation in output of different products	37
65. Reduction in profits largely due to world conditions	38
66. Some increase in world prices probable	39
67. Production of crude oil	40
68. Development work unlikely to be seriously restricted	41
69. Restriction of development in interest of shareholders	41
70. Price war an incentive to conservation of natural resources	42
71. Possible disappearance of smaller Companies, even if estab- lished, not necessarily ground for protection	43
72. Interest of the consumer	43
73. Consumer of inferior kerosene	44
74. Reasons for maintaining demand for inferior kerosene	44
75. Any further permanent change in differential between superior and inferior kerosene unlikely	45
76. Government's interest	45
77. General conclusion	46
78. Application for protection premature	46

CHAPTER IV.—THIRD TERM OF REFERENCE.

PARA.	PAGE.
79. Petrol supply barely equal to demand	48
80. Standard Oil Company's attitude	48
81. No import by Standard Oil Company likely within two years .	49
82. Conclusion as to probability of price war in petrol . . .	50
83. Estimates not to be taken as forecasts of balance sheets . .	51

CHAPTER V.—SUMMARY.

84. Summary	52
Note by the President	54

Minority Report.

CHAPTER I.—QUESTIONS TO BE INVESTIGATED—
DIFFICULTIES EXPLAINED.

1. Question to be investigated	59
2. Issues involved in the investigation	59
3. Causes of the kerosene rate war	60
4. Failure to disclose material facts	61
5. Difficulties experienced during present enquiry	62
6. Equivalent of world parity as claimed by the industry . . .	62
7. Evidence of Gulf prices unsatisfactory	63
8. Evidence of freight unsatisfactory	65
9. Current prices artificial	65
10. Foreign competition in respect of inferior kerosene only . .	66
11. Difficulty of ascertaining current prices of indigenous kerosene	66

CHAPTER II.—DUMPING. NOT ESTABLISHED.

12. Method of investigation	68
13. Investigation of financial effect of war limited to applicants for protection	69
14. American parity—September, 1927, to March, 1928	69
15. American parity—January to September, 1927	70
16. American parity—April, 1928	70
17. Prices of imported kerosene	71
18. No dumping proved	71

CHAPTER III.—CASE INVESTIGATED ON AMERICAN
PARITY PRICES CLAIMED BY INDUSTRY.

19. Realized prices unreal	72
20. Position of indigenous companies—January to June, 1927 . .	72
21. Position of indigenous companies—July to December, 1927 .	73
22. Realized prices—January to March, 1928	73
23. Financial results—January to March, 1928	73
24. Financial position—January, 1927, to March, 1928	74
25. Estimate of present selling prices	74
26. Estimate of reduction in revenue per month after May, 1928 .	75
27. Financial position considered	76
28. Attock Oil Company's case	76
29. No adverse effect of price war justifying national assistance and no recommendations	77

**CHAPTER IV.—REAL EQUIVALENT OF WORLD PARITY:
NO DUMPING: EFFECT OF POOL'S POLICY ON CON-
SUMER.**

PARA.	PAGE.
30. World parity defined	78
31. Reasons for rejecting industry's claim to American parity price	78
32. Price of Russian oil f.o.b. Batoum	79
33. Equivalent of price at Indian ports <i>ex</i> main installations	79
34. Realized prices well above world parity	80
35. If realized prices unremunerative, proper remedy application for protection	80
36. Claim of the Pool that poor consumer has benefited by its policy	81
37. Pool's prices: first half of 1927	81
38. Claim not established as regards first half of 1927	82
39. Extra burden on consumer	82
40. Position in the past	83
41. Difference between prices of inferior and superior kerosene not necessarily beneficial to poor consumer only	84

CHAPTER V.—PETROL.

42. Question of petrol	86
43. Decline in production accomplished by increase in demand	86
44. Shortage of petrol	87
45. No proposals possible	87

**CHAPTER VI.—EXORBITANT PRICES IN INDIA DEMAND
FURTHER EXPLORATION OF SUBJECT.**

46. Exorbitant prices	88
47. Margin between prices of crude and of finished products	88
48. Margin in America	89
49. Margin in India	89
50. Measure of exploitation of consumer	90
51. Monopoly the principal cause	90
52. Main remedy: introduction of competitive conditions by import of crude	91
53. Encouragement of genuine Indian industry	91
54. Advantage of imported crude	92
55. Alternative remedy: Government control of prices	92
56. Figures illustrative only	92

**CHAPTER VII.—SUMMARY OF CONCLUSIONS AND
RECOMMENDATIONS.**

57. Summary of conclusions and recommendations	94
--	----

Appendices.

APPENDIX	I.—Table showing imports of kerosene oil into India by Standard Oil Company of New York, from 1913 to 1927	97
"	II.—Table showing the cuts in price made in the bulk oil price <i>ex</i> main Indian Ocean installations by the Standard Oil Company of New York (Elephant Brand)	98
"	III.—Table showing total production of crude oil in India and Burma from 1916 to 1926	99
"	IV.—Table to show the approximate demand for petroleum products in India during the past eight years 1920 to 1927	100

Majority Report.

PRELIMINARY.

The subject of this enquiry was referred to the Indian Tariff Board under Government of India Resolution No. 141-T. (39),

dated the 26th March, 1928, which runs as follows :—

“ The Government of India have received representations from a number of companies engaged in the production of petroleum in India asking for protection against the injury inflicted on them by the kerosene price war now in progress in India between the Standard Oil Company of New York and the Royal Dutch Shell Group. The immediate cause of the price war is said to be the purchase by the Standard Oil Company of New York from the Soviet Government of Russia of kerosene which, as the Royal Dutch Shell Group claim, rightfully belongs, wholly or in part, to them. The companies state that as a result of the price war, kerosene is being sold at prices well below world parity, and it is from the serious losses consequent on these uneconomic prices that they ask for protection. The representations indicate that, while some of the producers do not regard their existence as threatened by the dispute, the position of the weaker companies is such that a continuance of the price war might lead to their extinction.

2. The Government of India are not prepared to agree to any scheme of protection which would lay a heavy burden on the consumers, if the result must be, so far as the principal producers are concerned, not to secure a moderate return on the capital invested in the business but to increase profits unnecessarily. It is possible, however, that measures could be devised by which substantial relief could be given to those companies which are most in need of it, while at the same time a disproportionate share of the higher price paid by the consumer would not pass into the hands of the stronger firms. In order that this question may be examined, the Government of India consider that an immediate enquiry should be held by the Tariff Board with the following terms of reference :—

- (1) To determine what price for kerosene should be taken to be equivalent to world parity at Indian ports, and the extent to which current prices in India are below that level,
- (2) To report whether it is in the national interest that protection against the dumping of imported kerosene should be given, and if so in what form and for what period, and
- (3) To report whether it is likely that the price war will extend to petrol, what the consequences to the Indian producers are likely to be if it does, and in that case what measures they would recommend.

3. The question to be investigated in the enquiry is the advisability of taking steps to safeguard an Indian industry

from injury inflicted by dumping, that is the sale of imported kerosene in India at prices below world parity. In these circumstances, the Government of India consider that no detailed examination of the costs of production will be necessary, and that it will suffice to ascertain by more summary methods the probable effect of the price war on the financial position of the Indian producers. The report of the Tariff Board should reach the Government of India at the earliest possible date, and in any case not later than the 1st July, 1928.

4. Firms or persons interested, who desire that their views should be considered by the Tariff Board, should address their representations to the Secretary to the Board."

Board's communiqué.

2. On receipt of this resolution the Board issued the following communiqué:—

"The Government of India in their Resolution No. 141-T (39), dated 26th March, 1928, have referred to the Tariff Board for summary investigation the applications for protection received from certain Companies engaged in the production of Petroleum in India. The Report of the Board has to reach the Government of India not later than the 1st of July, 1928. The terms of reference limit the enquiry to the following points:—

- (1) To determine what price for kerosene should be taken to be equivalent to world parity at Indian ports, and the extent to which current prices in India are below that level,
- (2) To report whether it is in the national interest that protection against the dumping of imported kerosene should be given, and if so, in what form and for what period, and
- (3) To report whether it is likely that the price war will extend to petrol, what the consequences to the Indian producers are likely to be if it does, and in that case what measures the Board would recommend.

Until the detailed representations called for by the Board are received, the Board will not be able to decide upon the procedure it will adopt or to lay down the directions in which the information furnished may require to be supplemented. In the meanwhile the Board issues the following instructions for the guidance of all Oil Companies interested in the enquiry whether as applicants or as opponents, and of those sections of the general public such as consumers and others who wish to submit their views for the consideration of the Board:—

- (1) The Board will close its office in Bombay on Thursday, the 12th April, and re-open it on the 20th April in Rangoon, in the Legislative Council Building.
- (2) Unless otherwise notified, formal proceedings will be opened in public in Rangoon at 11 o'clock on Tuesday, the 24th of April, at which the procedure and scope of the enquiry will be more fully explained. Applicants as

well as opponents are requested to attend and to be ready for a preliminary examination of their case on that day and on such subsequent days as may be necessary.

- (3) According to the normal procedure of the Board, as far as possible all the proceedings of the Board will be conducted in public, unless a reasonable case, which will be considered on its merits, is made out for holding them *in camera*.
- (4) The co-operation of any Oil Company which, without being a formal applicant, is interested in the results of the enquiry and can assist the Board with relevant information, will be welcomed.
- (5) The effect of the price war on the financial position of the Indian producer is, *inter alia*, one of the points to be investigated. That effect cannot be correctly measured without ascertaining (a) in the first instance whether the market price represents a fair selling price to the Indian producer, that is, a price which after covering all works costs leaves him a reasonable margin for overhead charges and profit, and (b) whether, if the price is inadequate, the financial resources of the industry are such as to enable it to supply the deficiency without permanent injury to the industry. For this purpose the Board would ordinarily undertake a detailed examination of the costs and financial resources. This however is not possible within the time at the disposal of the Board and in view of this the Board would request all the parties, in their own interests, to submit full information of their costs and their financial resources to the Board at the earliest possible date before the formal opening of the enquiry, and in any case not later than the 20th of April, 1928. The costs and information so furnished will be treated as confidential, and will not be published unless parties have previously agreed to their publication. In addition it is desirable that the companies should supply full information regarding the course of prices of kerosene and petrol in India, both at the ports and in other markets served by the companies, during the last 20 years. The prices of imported kerosene and petrol f.o.b. gulf ports should also be stated.
- (6) After the conclusion of the preliminary examination which the Board hopes will be not later than the 28th April, the Board will adjourn in order to consider what further materials are required from the parties at a fuller and more detailed examination subsequently. For this purpose the Board will resume its sittings at Maymyo about the second week in May. The dates by which the further materials, if any, should be furnished and the days on which representatives of the oil companies will be examined, will be notified later.

(7) Parties other than the oil companies should send in their written representations so as to reach the Board not later than the 24th of April. The Board does not propose to examine them orally. But if intimation of their desire to be so examined is given to the Board in their written representation, the Board will endeavour to give them an opportunity to appear at Maymyo for that purpose.

(8) No oral evidence will be taken after the 19th of May, but the Board hopes that the oil companies will arrange to supply without delay any information the Board may require between the termination of the public sittings and the submission of the report."

3. Since the period within which the enquiry was to be concluded was brief, the Board after the issue of this communiqué at Applications received. once proceeded to Rangoon where the head offices of most of the Oil Companies are situated. Applications were received from the following Companies:—

The Burmah Oil Company, Limited.

The Assam Oil Company, Limited.

The British Burmah Petroleum Company, Limited.

The Attock Oil Company, Limited.

The Indo-Burma Petroleum Company, Limited.

The Hessford Development Syndicate, Limited.

In the general representation of the indigenous oil companies, dated 15th December, 1927, addressed to the Government of India, the proposals were alternatively to prohibit Russian oil imports entirely or to increase the import duties on foreign kerosene as a whole *puri passu* with reductions on Indian market selling prices brought about by the rate war with a view to maintain the 'prewar' prices. By January of the following year (*vide* the joint letter of 18th January, 1928, addressed to the Government of Burma) the Companies while still urging that their original suggestions represented the only permanently effective measures to ensure protection to the indigenous industry against the menace created by the rate war, asked that with a view to granting immediate assistance to the smaller companies the excise duty on kerosene and petrol should be remitted on a total refinery throughput not exceeding 1,500 barrels of crude per diem. In the representations addressed to the Board in reply to the Board's communiqué the demands went even further and the majority propose that this remission of the exercise duty on kerosene and petrol on a throughput not exceeding 1,500 barrels of crude per diem should be granted not merely for the period of the war but as a permanent measure of relief to the indigenous industry from conditions arising from overproduction in other parts of the world. The Attock Oil Company, the Indo-Burma Petro-

leum Company, the Hessford Development Syndicate and the British Burmah Petroleum Company asked in addition that the import duty on kerosene and petrol should be raised permanently so as to be 2 annas 6 pies per gallon higher than the excise duty. Our terms of reference specifically define the question to be investigated as the advisability of taking steps to safeguard an Indian industry from injury by dumping as a result of the kerosene price war now in progress between the Standard Oil Company of New York and the Royal Dutch Shell Group, and any suggestion regarding measures of permanent relief or permanent protection, irrespective of the price war, is clearly outside the scope of the present enquiry.

4. In response to the Board's communiqué representations were also received from the following associations and individuals:—

1. Standard Oil Company of New York.
2. Asiatic Petroleum Company (India).
3. Indo-Burma Oilfields (1920), Limited.
4. The Vacuum Oil Company.
5. The Motor House, Rawalpindi.
6. The Indian Chamber of Commerce, Calcutta.
7. The Burma Chamber of Commerce, Rangoon.
8. Messrs. Chinoy and Company, Limited, Bombay.
9. The Irrawaddy Petroleum Syndicate.
10. The Moola Oil Company, Limited, Rangoon.
11. The Buyers and Shippers Chamber, Karachi.
12. The Indian Merchants' Chamber, Bombay.
13. The Burma Indian Chamber of Commerce.
14. The Maharashtra Chamber of Commerce, Bombay.
15. The Bengal National Chamber of Commerce, Calcutta.
16. Messrs. Gillanders, Arbuthnot and Company, Calcutta.
17. The Thilawa Refineries (Burma) Limited, Rangoon.
18. Motor Industries Association, Calcutta.
19. Mr. M. A. J. Noble, Bombay.
20. Mr. Walchand Hirachand, Bombay.
21. Mr. S. S. Haldar, Rangoon.

Of these the majority were opposed to the grant of protection to the Oil industry, the proposal being supported only by the Burma Chamber of Commerce, Messrs. Gillanders, Arbuthnot and Company, Calcutta, and Mr. M. A. J. Noble who is a member of the Bombay Committee and the Rangoon Advisory Board of the British Burmah Petroleum Company, Limited. The oral evidence of the applicant companies was recorded at Rangoon on 24th, 25th, 26th,

27th and 28th April and on 1st and 2nd May, 1928, at Maymyo on 9th, 17th and 18th May, 1928. The cost accounts of all applicant Companies were produced for examination by the Board, but all information regarding the costs of production was supplied in confidence. It has not, therefore, been possible to set forth the financial position of the different Companies after a critical examination of the costs of producing and refining the crude oil, nor indeed for the purpose of this summary enquiry does this appear necessary. For our immediate purpose it appears sufficient to set forth the effect of recent reductions in prices of oil products, both those caused by the price war and those resulting from changed economic conditions in the principal countries of supply, on a consideration of the recent balance sheets and profit and loss accounts of the Companies concerned. We desire to state, however, that our conclusions so formed have been checked by an examination of the costs. The figures which we have given must not be taken as indicating that losses cannot be further reduced or profits increased by the introduction of measures of economy, or variations in expenditure which have occurred in the period subsequent to that for which the balance sheets under consideration have been framed, but they may be considered as representing the maximum reduction in profits which is likely to occur in existing circumstances on the prices supplied by the Companies. Our figures indeed may be found to vary from those which an examination of the more recent costs reveals. But such variation is inherent in the method which the limitations of this enquiry impose on us. We are satisfied that the validity of our general conclusions is not affected thereby.

5. We desire to acknowledge the assistance which we have received in the course of our enquiry from the representatives of the

Acknowledgments. various Oil Companies. In particular, the

Burmah Oil Company, though not primarily an applicant for protection, has throughout the enquiry readily supplied us with all the information which we have required. We desire also to acknowledge the assistance we have received from Dr. J. Coggin Brown, D.Sc., O.B.E., our technical adviser.

Report on the Indian Oil Industry.

CHAPTER I.

The Indian Oil Industry.

1. The production of petroleum in India is at present confined to three areas, namely, the Attock District of the Punjab, Assam and Burma. The control of each of the first two fields is in the hands of a single company, *viz.*, the Attock Oil Company and the Assam Oil Company. By far the most important petroliferous area is in Burma and it is from the Burmese fields that more than nine-tenths of indigenous petroleum is obtained. The best known and oldest field in Burma is the Yenangyaung field, which lies two miles east of the Irrawaddy a few miles north of Magwe. The number of wells in this field held by the largest companies operating in Burma is as follows:—

The Burmah Oil Company	1,650
The British Burmah Petroleum Company	113
Rangoon Oil Company	118
Indo-Burma Petroleum Company	116

It is now generally recognized that production in the Yenangyaung field is on the decline and the Companies have in recent years looked to other areas to supply the deficiency.

2. The Yenangyat hills are situated on the right bank of the Irrawaddy in the Pakokku District. On the south they are cut through obliquely by the river and this southern continuation forms the oil field of Singu. While the production of the Yenangyaung field has declined, that of Singu has steadily risen and last year reached 98,700,000 gallons of crude petroleum. The field comprises an area of some 12 square miles, of which some 5 square miles are in the hands of the Burmah Oil Company, 2 square miles are held by the British Burmah Petroleum Company and one square mile by the Hessford Development Syndicate. North of the Singu field lies the Yenangyat field. This field has been almost fully exploited and is rapidly being exhausted, the total output in 1927 being 1,844,946 gallons.

3. The Minbu field runs from some five miles north-west of Minbu to the border of Thayetmyo District on the south, extending some 20 miles. The output of this field in 1927 was 5,199,950 gallons.

4. The Indaw field has not been geologically surveyed and little information is available. The output in 1927 was about $18\frac{1}{2}$ lakhs of gallons. The oil is conveyed by a pipe line to the Indo-Burma Petroleum Company's refinery at Panthay. There are 20 producing wells at present. The whole area is under the control of the Indo-Burma Petroleum Company and production is believed to be capable of considerable expansion. The field is remarkable for the large quantities of natural gas which it produces, much of which has been wasted in the past.

5. There are two fields in the Thayetmyo District. The Padaukpin field is 1.8 square miles in area and is situated eight miles north-west of Thayetmyo. It is under Thayetmyo oilfields. the control of the Indo-Burma Petroleum Company. Fifteen wells have been drilled, eight of which have been abandoned. The Yenamma oilfield is also held by the Indo-Burma Petroleum Company, the lease being for half a square mile. The limit of economic spacing has already been reached and apart from the possibilities of deeper production, output must steadily decline. The production of Thayetmyo district was, in 1927, 999,500 gallons. It appears, therefore, that with the exception of the Singu and Indaw fields, production in the Burma fields has already reached its maximum and must decline in future, save in so far as production may be increased by deeper drilling or the discovery of extensions of the oil bearing strata. On the other hand, the possibilities of both the Attock and the Assam fields are considerable. In the Attock field production has in the last year nearly doubled and deep drilling which has been undertaken in the Khaur field is considered to have given most promising results. In the Assam field development work has been on an extensive scale since the Burmah Oil Company obtained control of the Assam Oil Company in 1921. Production which in 1922 stood at 5 million gallons of crude had by 1927 risen to 22 million gallons. An extension of production in both these fields in the future is generally accepted as being by no means improbable. It will appear, therefore, that in order to maintain the oil production of India at its present level, it is a matter of some importance that the Oil Companies should be in a position to continue prospecting and development work.

6. In considering the industry as a whole and also with reference to individual companies, we shall have occasion to refer briefly to such matters as competitive drilling, gas conservation and the like. Some explanation of such terms is required and in the following paragraphs we have endeavoured to set forth briefly the main features of the industry which have a direct bearing on this enquiry. Petroleum deposits occur in strata of porous rock such as sandstone at varying depths below the earth's surface with a layer of impervious rock both above and below the oil sand. The method of extraction is by drilling wells into the area or pool where the deposit occurs. Crude oil exists under pressure caused by imprisoned natural gas

which is almost universally associated with petroleum. This gas may either be free or held under pressure in the crude oil. When an oil bearing stratum is first tapped by a well, the free gas at first escapes. At a later stage, as the pressure declines, the gas contained in the crude oil is released and also makes its way into the well and thence to the surface. This gas brings with it the more volatile elements of the crude which may be recovered in the form of petrol by the process known as stripping. The stripped gas forms an important fuel for the generation of power in the oil fields. As the gas escapes into the well, it draws with it the crude oil from the porous rock in which it is contained and forces it to the surface. But the gas is more mobile than the oil and slips through the pores of the sand more readily and escapes at a more rapid rate. The pressure is exhausted long before all the oil has been recovered. Only a portion (estimated by the best authorities at about 35 per cent.) of the crude oil existing in an oil bearing stratum can be won by modern drilling methods and the amount of recovery depends almost entirely on the pressure of the gas. It is therefore of the utmost importance if a country is to derive the full benefit of its oil resources—

- (1) to utilize surplus gas to the utmost as a source of power;
- (2) to recover all petrol from the gas before so using it;
- (3) to conserve gas pressure in the wells so as to obtain the maximum output of oil.

7. Since oil is migratory and will travel underground, it often happens that oil located on one lease can be tapped by wells sunk on a neighbouring concession. Further, the

Competitive drilling. amount of oil which can be extracted from any one pool is not unlimited. Within limits the greater the number of wells sunk the greater the production, at any rate at the commencement of operations, though with proper spacing of wells the ultimate recovery of oil is considerably increased. Where an oil bearing area can be tapped from two or more concessions, a race in drilling ensues. Although in certain circumstances the oil raised to the surface may thereby be increased, since the cost of sinking a well may be anything between £5,000 and £10,000, the cost of oil extraction per unit is much enhanced. This is particularly the case when, as often occurs, the necessity for speed in operation under competitive conditions leads to expensive preparations for drilling which in the light of subsequent information have to be abandoned.

8. The most economical method of transporting crude petroleum is by means of a steel pipe through which the oil is pumped to the refinery. The pipe line is often of great

The pipe line. length. In America pipe line systems of 1,000 miles or more occur. Thus the Sinclair Consolidated Oil Corporation in 1920 operated approximately 2,800 miles of pipe line. The only companies in India which own a pipe line connecting with the refinery are the Burmah Oil Company, the

Attock Oil Company and the Indo-Burma Petroleum Company. The length of the Burmah Oil Company's line which extends from the oilfields to Rangoon is some 275 miles, while that of the Attock Oil Company to the Rawalpindi refinery is 54 miles. The Indo-Burma Petroleum Company's line extends from the Indaw field to the refinery at Panthay, a distance of 27 miles. The Burmah Oil Company has been declared a common carrier in respect of its line, but for various reasons, the chief of which is perhaps the possibility of the mixing of different grades of crude, none of the other companies have so far transported their petroleum through the Burmah Oil Company's pipe line.

9. The crude oil is conveyed to the refinery through the pipe line, or in the case of some Indian companies by boat, and is there subjected to different refining processes to extract the various products. The following are the main petroleum products manufactured in the Indian refineries:—

- Superior kerosene.
- Inferior kerosene.
- Petrol.
- Lubricating oil.
- Wax.
- Jute batching oil.
- Turpentale.
- Diesel fuel.

There are other products also, such as Windsor oil, Absorption oil and Asphalt, but these are not produced in sufficient quantities to affect materially the finances of the smaller companies which we are considering in this enquiry. It is necessary to note that the relative proportion of even the main products can be varied to a considerable extent without any radical change in the processes employed. By utilizing the American process of cracking the crude oil under great pressure after removing the more volatile elements, a considerable increase in the output of petrol and superior kerosene can be obtained. This process has been adopted on a commercial scale in India by the British Burmah Petroleum Company and has so far only been applied to the residue of the crude after extraction of superior kerosene, inferior kerosene and wax by the ordinary processes.

10. The following are the Oil Companies which constitute the indigenous petroleum industry:—

- The Burmah Oil Company, Limited.
- The Assam Oil Company, Limited.
- The British Burmah Petroleum Company, Limited.
- The Rangoon Oil Company, Limited.

The Indo-Burma Petroleum Company, Limited.
 The Hessford Development Syndicate.
 The Attock Oil Company, Limited.
 The Irrawaddy Petroleum Syndicate.
 The Moola Oil Company, Limited.
 The Indo-Burma Oilfields, Limited.
 The Thilawa Refineries (Burma), Limited.

Of these the latter has ceased working, being unable to obtain supplies of crude oil. The Indo-Burma Oilfields, Limited, is in the hands of a receiver on behalf of the debenture holders and produces a small amount of crude oil only. Both the Irrawaddy Petroleum Syndicate and the Moola Oil Company are in the initial stage, having been reorganized recently and being in the course of drilling for oil.

11. The Burmah Oil Company has advanced the Assam Oil Company £900,000 and holds 90 per cent. of the share capital of that Company. The British Burmah Petroleum Company has no separate marketing organization but utilizes the agency of the Burmah Oil Company for the sale of its products. The Rangoon Oil Company is practically identical with the British Burmah Petroleum Company, the latter Company holding 96 per cent. of shares in the former. The Rangoon Oil Company produces only crude oil, the whole of which is sold to the British Burmah Petroleum Company. The Indo-Burma Petroleum Company under the management of Messrs. Steel Brothers has its own marketing organization and is in no way connected with the Burmah Oil Company. It holds 33,000 out of a total of 250,000 shares in the Hessford Development Syndicate which is a private company, while Messrs. Steel Brothers hold 66,402 shares. The companies are, therefore, very closely associated. The Attock Oil Company is under the management of Messrs. Steel Brothers who also hold 446,805 of the shares but utilizes the Burmah Oil Company's organization for the marketing of its products. The Company's wells and refinery are situated in Attock District in the Punjab. With the exception of this Company and the Assam Oil Company all the Companies conduct their operations in Burma while the main refineries are situated near Rangoon.

12. It will be seen that the Companies fall into two independent groups, one comprising the Burmah Oil Company, The Assam Oil Company, The Rangoon Oil Company and The British Burmah Petroleum Company, the other the Indo-Burma Petroleum Company and the Hessford Development Syndicate. The Attock Oil Company occupies an intermediate position having the same managing agents as the Indo-Burma Petroleum Company but utilizing the marketing agency of the Burmah Oil Company group. It is perhaps desirable here to explain that the Asiatic Petroleum Com-

pany (India), Limited, was until recently the marketing organization of the Royal Dutch Shell Group of oil companies in India. Its function was sale only and it was in no way concerned with the production or refining of oil. Since December last its business has been taken over by the Burmah Shell Oil Storage and Distributing Company of India, Limited, a Company formed in that month to amalgamate the marketing organizations in India of the Burmah Oil Company, Limited, and the Asiatic Petroleum Company (India), Limited.

13. The Burmah Oil Company was formed in 1902, being a reconstruction of a company formed in 1886. Its original capital was £1,145,114 of which £980,000 were ordinary shares and £165,114, 6 per cent. preference shares. In the early days of its existence it had to face very strenuous competition from the Royal Dutch Shell Group and in the price war which extended from 1895 to 1905 the maximum reductions in price by the Burmah Oil Company were 10 annas for superior and Rs. 1-3-0 for inferior kerosene per unit of 8 gallons, and allowing for difference in money values at that time it is probable that the price war was at least as intense as that at present prevailing. The price war came to an end in 1905, the Royal Dutch Shell Group and the Burmah Oil Company coming to an understanding by which the indigenous companies were given the first right to the Indian market, it being understood that any deficiency in the supply should be supplied by the Royal Dutch Shell Group. In the same year the Burmah Oil Company initiated their maximum price policy under which 195,000 tons of inferior kerosene were priced at a maximum price of Rs. 2-14-0 per unit *plus* duty. By this agreement the possibility of competition from the only source of oil supply near India, *viz.*, the Dutch East Indies, was eliminated, while the combination of the Royal Dutch Shell Group and the indigenous companies gave them effective control of the Indian market. The geographical position of these companies afforded them such advantages by way of freight and other charges as to deprive the Standard Oil Company of the power to initiate a price war with any hope of success, and in fact up to the present time the policy of the Standard Oil Company has been to follow the prices fixed by the Royal Dutch and the Burmah Oil Company's organization. During the period subsequent to 1905 conditions remained practically unchanged save in 1911 when, according to the evidence of the Asiatic Petroleum Company's representative, that Company attacked the Standard Oil Company in order to check the expansion of its trade. The Burmah Oil Company also became involved in this war. The maximum reductions in price by the Burmah Oil Company were Rs. 1-2-0 per unit of 8 gallons for superior and Rs. 1-4-0 for inferior oil. There have, therefore, been two occasions when the Burmah Oil Company has been involved in a price war comparable in intensity to the present price war. On each occasion the inherent strength of the Company has enabled it to survive and no lasting injury has been caused to the indigenous industry. •

Financial progress.

14. The following Table shows the expansion of the Company's issued capital:—

—	Ordinary.	Preference	TOTAL.
	£	£	£
Original . . .	980,000	165,114 (6% £1)	1,145,114
1903 . . .	11,356 (subscribed)	200 (6% £1)	1,156,670
1904 . . .	108,844 „	84,886 (6% £1)	1,350,000
1905 . . .	.....	500,000 (6% £10)	1,850,000
1907 . . .	.....	250,000 (6% £10)	2,100,000
1909 . . .	170,000 (subscribed)	.....	2,270,000
1910 . . .	635,000 (bonus)	.. ..	2,905,000
1918 . . .	952,500 „	.....	3,857,500
1920 . . .	2,286,000 „	... ..	6,143,500
1921 . . .	7,462 (subscribed)	3,000,000 (8% £1)	9,150,962
1922 . . .	120 „	.....	9,151,082
1923 . . .	110 „	... ..	9,151,192
1926 . . .	1,717,064 (bonus)	... .	10,868,256
TOTAL . . .	6,868,256	4,000,000	10,868,256

In addition, in 1903, £500,000 debentures were outstanding, but these were all paid off by 1913. Of the Ordinary capital of £6,868,256, £5,590,564 represents bonus shares. The following distributions of dividends have been made on ordinary shares:—

	Per annum.
1902)	
1903)	15 per cent.
1904)	
1905	10 „
1906	20 „
1907)	
1908)	30 „
1909)	
1910	20 „
1911	15 „
1912	20 „

		Per annum.
1913	}	
1914		
1915		27½ per cent.
1916		30 „
1917		32½ „
1918		30 „
1919		50 „
1920	}	
1921		
1922		30 „
1923		
1924	}	
1925		35 „
1926		30 „
1927		20 „

It appears, therefore, that an original holder of £100 shares in this Company would now hold shares of the nominal value of £540, which at present market quotations would be worth over £2,400 and in the period 1902—1927 would also have received dividends of over £1,600.

15. This Company was formed on 8th February, 1909, to acquire as a going concern the mineral oil business carried on by Messrs. Indo-Burma Petroleum Company. A. S. Jamal Brothers and Company. The whole of the ordinary share capital was held by Messrs. Steel Brothers and Company, Limited, and Messrs. Jamal and Company, Limited, until the end of 1921 when Messrs. Jamal Brothers and Company disposed of their shares. Messrs. Steel Brothers now hold 69 per cent. of the ordinary shares. The following Table gives the financial history of the Company:—

Ordinary Capital.

	Rs.	
1909	75,00,000	
1911	87,20,000	(Rs. 12,20,000 subscribed).
1912	93,38,000	(Rs. 6,18,000 subscribed).
1921	1,54,42,200	(Rs. 56,50,000 bonus). (Rs. 4,54,000 subscribed).
1922	1,55,95,000	
1925	59,26,100	
1926	68,61,800	(Rs. 9,35,700 bonus).

Preference Capital.

1927	30,00,000
------	-----------

In 1925 the capital was reduced, the shares in the Attock Oil Company held by the Indo-Burma Petroleum Company being dis-

tributed to shareholders. Dividends have been uniformly high, the lowest being $8\frac{1}{2}$ per cent. in 1911 and the highest 75 per cent. in 1919, the average between these years being just under 27 per cent.

16. The Attock Oil Company was registered in 1913 to exploit certain areas at Khaur in the Attock District of the Punjab. The capital was originally £25,000 in ordinary shares. It was increased to £75,000 in 1916 and to £575,000 in August, 1919. In March, 1921, a further issue of 500,000 £1 shares was made at a premium of £2 each. Subsequently the premium was capitalized by the allotment of a further £425,000 ordinary shares and the present capital stands at £1,500,000. Dividends have been paid at 6 per cent. in 1923 and at 10 per cent. in 1924.

17. The British Burmah Petroleum Company was formed in 1910 to acquire a controlling interest in the Rangoon Oil Company, and to purchase the properties of the Rangoon Refinery Company and the Aungban Oil Company, Limited. The Company now holds 96 per cent. of the shares in the Rangoon Oil Company. Besides extensive properties in the Yenangyaung and Singu oilfields in Burmah, the Company has an interest in the Comodora Rivadavia Field in Argentine through the Eastern Petroleum and Finance Company, Limited. The capital was originally £2,500,000 in £1 shares, but was reduced to £1,000,000 in 1914 by writing off 12 shillings a share. In November, 1919, 525,772 shares of 8 shillings each were issued at a premium of 12 shillings each. The capital, therefore, now stands at £1,240,000 in 3,100,000 shares of 8 shillings each. The premium on the last issue of shares, viz., £315,463, was utilized in writing off the value of 100,000 £1 shares in the Eastern Petroleum and Finance Company and this asset no longer appears in the balance sheet. The balance was transferred to the reserve and contingent reserve accounts. The Company has made two issues of debenture stock. The first was made in October 1910, to the value of £524,908. The trust deed provides that a sum of £25,000 shall be set aside to provide a sinking fund for the redemption of the stock at 110 per cent. by yearly drawings. The debenture stock is repayable at 110 per cent. in 1932. The second debenture is for £600,000 repayable at 105 per cent. on or before November, 1936. Provision is made for the payment annually of £42,000 into a sinking fund; but this payment is not enforceable save to the extent of the profits of the Company. The Company's balance sheet for 1927 shows that £412,846 of the first debenture stock and £167,943 of the second debenture stock have been paid off. The dividends of this Company have been moderate, varying from 20 per cent. in 1919-20 to *nil* in 1923-24. The average dividend between 1916 and 1927 is between 9 and 10 per cent. An agreement has been made with the Burmah Oil Company whereby that Company acts as selling agents in India and Burmah.

18. This Company was registered in 1909 and holds State leases over the Digboi and other oil bearing properties in North East Assam. Control of the Company passed to the Assam Oil Company. the Burmah Oil Company in January, 1921, shareholders being offered £2 cash for each Assam share, preference or ordinary, or one Burmah Oil Company ordinary £1 share for every $4\frac{1}{2}$ Assam shares, preference or ordinary. Capital has been issued to the extent of 90,000 7 per cent. cumulative preference shares and 310,000 ordinary shares of £1 each. The total issued capital is, therefore, £400,000. No bonus shares have been issued. The Company paid a small but fairly steady dividend which in the years 1917 to 1919 reached 8 per cent. Since the Burmah Oil Company assumed control, no dividend has been paid probably on account of the extensive prospecting and development work which has been undertaken.

CHAPTER II.

The Kerosene Pool: Origin of price war: First term of reference.

19. We have now given the chief financial features and history of the leading Oil Companies in India. The other smaller companies call for no remark at this stage. The Kerosene Pool. The Burmah Oil Company, the premier oil company in India, by its arrangement with those companies whose properties are so situated as to enable them to offer formidable competition in the Indian market, viz., the Royal Dutch Shell Group and more recently the Anglo-Persian Oil Company, has secured an organization capable of controlling and fixing the price of oil products in India. To understand how this control is exercised it is necessary to consider the working of the organization known as the Kerosene Pool. The following are the companies which contribute to the Pool:—

The Royal Dutch Shell Group.

The Burmah Oil Company.

The British Burmah Petroleum Company, and

The Assam Oil Company.

The Attock Oil Company is a contingent contributor, no contribution being made unless the production of oil is in excess of that required to supply its economic area. Within this economic area the Attock Oil Company uses the marketing organization of the Burmah Oil Company to dispose of its oil. No contribution has as yet been made by this Company to the Pool.

20. The principles governing the operation of the Pool have been explained to us as follows. In accordance with the maximum price policy of the Burmah Oil Company, 195,000

Principles of Kerosene Pool. tons of inferior oil is sold to the Pool at a fixed price of Rs. 2-14-0 per unit of 8 gallons *plus* excise duty (8 annas). The contribution of 195,000 tons is distributed among the companies as follows. The contribution is only made in respect of kerosene in excess of that obtained from 1,000 barrels of crude a day. The quantity of inferior kerosene in excess of this is contributed to the Pool in proportion to the volume of the production. It is claimed that the balance of inferior kerosene and all superior kerosene is contributed at a price not above and generally below the price of imported oil. The contribution of imported superior kerosene from the Royal Dutch Shell Group is made at a price corresponding to world market values at the time, while inferior oil supplied by the same Company is purchased at 4 annas less per unit of 8 gallons. It is claimed also that while the price of superior oil may fluctuate from one period to another above or below world parity, on the aver-

age the consumer obtains his kerosene well below world parity. The prices paid by the Pool to its contributors are fixed every half year. The details considered in fixing the import price are as follows:—

- (a) The current price f.o.b. American Gulf port.
- (b) Transport charges.
- (c) Import duty.
- (d) Profit at 10 per cent. on (a) and (b).
- (e) Storage.

21. The oil received by the Pool from the different companies is frequently mixed before sale. It is then sold at prices which it is estimated will cover the price paid to the contributing companies by the Pool, a difference being maintained between the price of inferior and superior oil, which in 1927 stood at Re. 1-6-0 per unit of 8 gallons. Any surplus or deficit in the price paid to the Pool over that paid by the Pool is adjusted in the price fixed for the succeeding period of six months.

22. We have seen how the Burmah Oil Company by its arrangements with those companies operating in countries so situated as to afford opportunities for effective competition in the Indian market, secured to itself and its associated companies the power of controlling prices in India, and in fact since 1905 the price fixed by the Burmah Oil Company or the Kerosene Pool has been followed by the Standard Oil Company and also by those Indian companies, such as the Indo-Burma Petroleum Company, which stand outside the Burmah Oil Company's organization. For the former owing to the distance of its sources of supply from the Indian market, any competition against the Royal Dutch Shell Group and associated Indian companies by way of a reduction in prices would have been a hazardous experiment. The independent Indian companies producing not one-twelfth of the output of the Burmah Oil Company alone, were in no position to challenge the policy of the Pool. The general position as regards the Pool's control of prices has been entirely changed during the last year.

23. The kerosene price war, which is the subject of our enquiry, is alleged to have originated by the purchase of oil by the Standard Oil Company from the Soviet Government of Russia. It is alleged that this oil has been obtained from properties from which the former owners have been expropriated without compensation by the Russian Government and which can therefore be and is being sold at uneconomic prices. The Royal Dutch Shell Group, by whom certain of the Russian properties were held before they were dispossessed by the Russian Government, protested against the action of the Standard Oil Company of New York and threatened, in the event of such oil being landed in India, to initiate a price war. On the 21st September, 1927, two days before the first consignment of Russian kerosene was landed, the Asiatic Petroleum Company, acting on behalf of the Royal Dutch

Shell Group and the Burmah Oil Company, announced a reduction in price of Re. 1 per unit of 8 gallons. This was followed by a further cut of 4 annas on the next day. The reductions continued and by the middle of November had reached a total of Rs. 2-8-0 per unit in Bombay. Different portions of the country were differently affected, the smallest reductions being in Calcutta while Burma was not affected at all and Chittagong only to a small degree. From November prices gradually rose and at the present time stand at Re. 1-8-0 for superior and Re. 1 per unit for inferior kerosene below those existing before the price war was initiated. These reductions were followed by corresponding reductions in the price of oil sold by the Standard Oil Company of New York. From the statements of the representatives of the Burmah Oil Company and the Asiatic Petroleum Company it appears probable that unless the Standard Oil Company of New York comes to terms, prices will be stabilized at somewhere about the present level.

24. It is not disputed that the initiative in this price war was taken by the Royal Dutch Shell Group and that the Standard Oil Company merely followed the reductions made by its rivals. The ostensible reason for the price war was the sale of Russian oil, stated to be 'stolen oil', in India. The real cause appears to be somewhat different. It has been shown that the Burmah Oil Company by its arrangements with all producing companies operating in countries comparatively close to India, obtained control of prices and rendered it difficult for the Standard Oil Company, so long as prices were based on American Gulf prices, to sell at a lower level in the Indian market. The position is now changed. By obtaining its supplies from Russia, the Standard Oil Company, apart from any question of the price at which the oil is supplied, has a definite advantage by a reduction in the distance from India of its source of supply. The freight from Batoum is 11 annas per ton against Re. 1-3-0 from American Gulf ports. There is also a reduction in leakage and in insurance fees, while the capital invested in oil is locked up for a shorter time. The total advantage thus obtained is not less than 8 annas a gallon. The Standard Oil Company is thus in a much better position to challenge the position of the oil ring in India by reducing prices whenever it considers the time most opportune. The representative of the Asiatic Petroleum Company has admitted that even though the Standard Oil Company were to import oil not from Russia but from Africa, Arabia or any country situated nearer to India than America, a price war would have been commenced by the Royal Dutch Shell Group. While considerations of the interests of expropriated oil companies in Russia may have played some part in determining the policy of the Royal Dutch Shell Group, it is at least equally the aim of the price war to force the Standard Oil Company into recognition of the arrangements of the Indian oil ring. The Indian market for petroleum is rapidly increasing, especially for petrol. If the Standard Oil Company were confined to American supplies, this increase would be mostly to the benefit of the Royal Dutch Shell Group and the Anglo Persian Oil

Company, the position of the latter company in the Indian market having recently been recognized by the former company; for the freight from America is high while taking a long view there may be a possibility of a shortage in the American supply of the Standard Oil Company. The acquisition of Russian supplies places the Standard Oil Company in an advantageous position. The necessity for reducing prices arises only if there is a dispute as to the division of the Indian market, more particularly as regards the increase in the Indian demand. How this increase is to be allocated hereafter between the Standard Oil Company, which has mainly held the field in the import trade in India, and the Royal Dutch Shell Group and Anglo Persian Oil Company with nearer sources of supply, seems to be the underlying motive of the price war.

25. It is suspicion of the future course of action of the Standard Oil Company which has probably determined the attitude of the

Attitude of Indian companies.	Indian members of the Kerosene Pool. It has been represented to us that the war has been initiated by the Royal Dutch Shell Group and that the Indian companies have been forced into unwilling participation, since their prices could not be maintained if the prices of non-Indian companies were reduced. This appears to us to be a very incomplete account of the position and it is not entirely supported by the facts which have come to our notice. Under the agreement with the constituent companies, six months notice was required before the Kerosene Pool could have been dissolved. It is admitted that the Indian companies could, had they so desired, have insisted on the maintenance of prices until the end of December, but they waived their rights under the agreement and reductions in price actually occurred in September. This in itself is a matter of no great importance since, had the Indian companies chosen to insist on their rights, such action might merely have deferred but not avoided the price war. Even the statement contained in the letter of the Burmah Oil Company to its agents that "it is out to take every unit of trade from the Standard Oil Company" may be explained on the ground that once the Indian companies were involved in the war it was desirable to push it to a quick conclusion.
-------------------------------	--

26. There are, however, two other matters which have come to our notice. The first is that the Royal Dutch Shell Group

Consideration for Indian companies' support	are paying to the Burmah Oil Company and the other Oil Companies which were members of the kerosene ring, half the difference between Indian oil prices and Chinese
---	---

prices of oil, and the second is that the Anglo Persian Oil Company, in which the Burmah Oil Company has a very large holding, was given a share in that part of the Indian market which could not be supplied by the indigenous production. The fact that the Burmah Oil Company and other companies might receive compensation for a portion of the losses incurred was a material fact having a possible bearing both on the financial position of the companies and on the claim for protection. It was not brought to the notice of the Govern-

ment of India when the Companies first applied for protection. It has been explained to us that the matter was not disclosed in the joint representation, dated the 15th December, 1927, because some of the signatories to that representation were not affected by the arrangement while there was no evidence at that time that any relief would result. The matter involving as it did the recognition by the Royal Dutch Shell Group of the claim of some of the Indian Companies to compensation was clearly of great importance and we cannot but regard this omission, whether intentional or not, as singularly unfortunate. It appears to us that this agreement to grant compensation, taken with the concession to the Anglo Persian Oil Company, constitutes the inducement offered to the Burmah Oil Company group for their assistance in the price war. The Burmah Oil Company has represented that though the compensation arrangement was discussed with the Asiatic Petroleum Company at the opening of the rate war, agreement was not reached until some time after the outbreak while the negotiations between the Asiatic Petroleum Company and the Anglo Persian Oil Company regarding participation in markets were not confined to India but included other Eastern countries and had been carried on for a considerable time before the opening of the rate war in India. Agreement in principle had been reached at about the beginning of July before there was any sign of the dispute in India. It is argued, therefore, that the arrangements between these two companies had no connection with the losses incurred owing to the price war. Since the question of compensation was discussed at the opening of the war, it appears clear that this constitutes to some extent the price of the Indian Companies' support. As regards the arrangement with the Anglo Persian Oil Company, it is admitted that the importation of Russian oil into India by the Standard Oil Company emphasized the truth of the Anglo Persian Oil Company's contention that there was no reason why they should keep out of the Indian market which lies so to speak at their door. Further, the concession which the Standard Oil Company of New York obtained from the Soviet Government, appears to have been arranged in the latter half of 1926, some time before any agreement was arrived at regarding the Anglo Persian Oil Company's future position in the Indian market. This concession to the Anglo Persian Oil Company, in which the Burmah Oil Company has a large stake, coming at such a time cannot have failed to influence the Burmah Oil Company in the direction of joining forces with the Royal Dutch Shell Group. Remembering that the agreements entered into by the Standard Oil Company for oil from a Russian port threatened the market arrangements of the Burmah Oil Company and its associates, it is easy to understand the attitude of the Indian industry. We believe, therefore, that the Burmah Oil Company consented to and actively supported the price war initiated by the Royal Dutch Shell Group, while the associated Indian companies under their arrangements with the Burmah Oil Company were compelled to follow the lead given by the premier Indian Company.

27. The first of our terms of reference requires us to determine what price for kerosene should be taken to be equivalent to world parity at Indian ports and the extent to which current prices are below that level.

World parity. As we have seen in the previous paragraphs the Oil Companies claim that the equivalent of world parity at Indian ports is the price of imported oil as determined by the principles of the Kerosene Pool, and it is necessary to decide whether this or some other interpretation of the term is to be accepted. The question of world parity is not free from difficulty. The price of oil fluctuates from day to day and is also liable to violent disturbance in periods of flush production, such as has recently occurred in America. The determination of any definite figure as representing over a long period the general level of prices of such a commodity is clearly impossible. The expression 'world parity price' is generally used to indicate that price which determines the level of oil prices throughout the world. In this sense we should reply that since America accounts for nearly 80 per cent. of the world's oil production, the American f.o.b. price at the largest centres of export, namely the Gulf ports, may be considered the world parity price, and we understand that this interpretation is in general accord with the opinion of the oil trade.

28. Since for reasons already stated, any prospect of stable oil prices is extremely remote it will serve no useful purpose to attempt to forecast the level of future prices on the basis of an average of prices during any fixed period. We are required to compare the current prices of oil with the equivalent of world parity at Indian ports, and for this purpose it appears natural to take as the world parity price the current level of the American Gulf price. There is another reason for this course. The Oil industry has recently been passing through a cycle of over-production, largely due to 'flush' production in new fields in America. Such conditions last for a time only. Recently restriction of production has been introduced in various fields in America and there has been a tendency in the last six months in some of the more important oil-fields for the price of crude petroleum to rise. No great improvement can be expected in the near future so long as potential supplies are in excess of demand, but we understand that the situation is now regarded as past the worst, thanks to determined efforts to control production*. We think, therefore, that if we take the present level of American Gulf prices as indicating world parity, our report is more likely to represent the facts accurately at the time it is considered by the Government of India than if we took an average price for any period during the last two years.

29. The applicant companies have furnished us with Reuter's Petroleum Service quotations, f.o.b. New York, from which it appears that the price of Standard white kerosene on 23rd April (the last quotation furnished to us) was 7 cents. per American gallon. Gulf prices are usually half a cent. below New York prices and it would appear,

Price figures.

*Vide National City Bank of New York Circular, April 1928.

therefore, that the Gulf f.o.b. price at that date was 6-50 cents. per American gallon. In a telegram dated 24th April, 1928, to the address of their Indian Manager, the Standard Oil Company of New York states that there is no posted bulk price f.o.b. Gulf ports and that Reuter's cables are merely indications of market conditions based on occasional reports of sales made for export. The Company in the same telegram states that the New York f.o.b. price for petroleum oil was 6-25 cents. which would indicate a Gulf f.o.b. price of 5-75 cents. per American gallon. It is not clear, however, to what quality of oil the price refers or on what scale transactions took place. From the prices as given in Reuter's cables supplied by the applicant companies, it appears that New York prices, which in July 1927 stood at 5-75 cents, steadily rose and reached on 23rd April 7 cents per American gallon. We are aware that actual transactions in the market may take place at lower rates than Reuter's quotations. But in the varying circumstances under which actual sales are made, no uniform rate can be presumed. On the whole we think that Reuter's quotations afford a reliable indication of the current level of prices for the purpose of determining world parity. It appears to us, therefore, that a New York price of 7 cents corresponding to a Gulf price of 6-50 cents. per American gallon fairly represents the present level of prices. The equivalent of 6-50 cents per American gallon is Re. 1-12-7 per unit of 8 Imperial gallons.

30. It is by no means easy to determine what is the equivalent of this price at Indian ports. The Oil Companies claim that the import price as calculated for the purpose of the Kerosene Pool should be so regarded. On this interpretation the equivalent of world parity at Indian ports *ex-installation* would be as follows:—

	Rs. A. P.
F.o.b. Gulf price 6-50 cents per American gallon	
or 65 cents per unit of 8 gallons	1 12 7
Freight	1 3 0
Leakage and insurance	0 0 6
Profit 10 per cent. on c.f.i.	0 4 10
Import duty and other charges	1 8 6
	<hr/>
	4 13 5 per unit of 8 gallons.

Freight is the same to all Indian ports though running charges to the different ports vary slightly. The freight has been calculated by the applicant Companies on the basis of a time charter at eight shillings per dead weight ton per month and the figure has been agreed to by all the Companies as an item in the calculation of world parity price. It may be pointed out that there has been a heavy fall in freight charges from 12 shillings 6 pence in 1927 to 8 shillings per dead weight ton.

31. There are however two adjustments to be made. The world parity price as detailed above is the price which in the past the Pool has paid to the Royal Dutch Shell Group for imported superior kerosene. We understand

Adjustments.

that of the 10 per cent. profit charged in the Pool's calculation of world parity, half is paid by the Royal Dutch Shell Group to the Kerosene Pool for its services in connection with distribution. Profit as an item in the cost at Port should therefore be reduced to 5 per cent. and the world parity price would then be Rs. 4-11-0 per unit of 8 gallons. There is another point to be considered. There are two grades of kerosene made in India, superior and inferior. Inferior oil of the quality made in this country is not produced elsewhere, and the world parity price applies only to superior oil. At the same time no comparison of the equivalent of world parity price at Indian ports with current prices would be reasonable, unless account is taken of the fact that of the total Indian output, inferior quality accounts for two-thirds and superior for one-third. No world parity price exists for inferior kerosene of Indian quality. There is, however, an inferior kerosene of somewhat superior quality imported by the Kerosene Pool and mixed with their inferior kerosene. The price of this we have been informed is some 4 annas below world parity, or on the figure given above Rs. 4-7-0. Taking the average of these two prices in the proportion which Indian superior bears to Indian inferior kerosene, we obtain an average of Rs. 4-8-4 per unit of 8 gallons.

32. There is, however, another way of regarding the question of world parity. Large quantities of Russian oil are now imported

Another view of equivalent of world parity.

whether in determining the equivalent of world parity at Indian ports, Russian prices and the freight from Batoum should not be taken as the basis for calculation rather than American prices and the freight from Gulf ports. It is alleged that Russian oil is obtained at uneconomic prices. We have no precise information on this point, but assuming that Russian oil was purchased at Gulf f.o.b. prices, it may be claimed that it could be landed in India at lower prices than the world parity price as understood by the Kerosene Pool. Freight from Batoum is 8 annas less per unit than freight from America. Since the transport from Batoum takes about half the time of transport from America, charges for insurance and loss by leakage should be halved and will then stand at 3 pies. In the same period double the quantity of oil can be shipped from Batoum as from America and it would be reasonable therefore to reduce the rate of profit from 5 to $2\frac{1}{2}$ per cent. Other charges remain unchanged. We thus obtain the following figure as the equivalent of world parity at Indian ports—

	Rs.	A.	P.
(a) World parity price	1	12	7
(b) Freight	0	11	0
Leakage and insurance	0	0	3
(c) Import duty	1	4	0
(d) Profit at $2\frac{1}{2}$ per cent. on (a) and (b)	0	1	0
Storage	0	3	0
(e) Other charges	0	1	6
	<u>4</u>	<u>1</u>	<u>4</u>

Accepting then the equivalent of world parity price at Indian ports

for superior oil of Rs. 4-1-4, the corresponding price for inferior oil would be Rs. 3-13-4. Taking the average of these two prices in the proportion which the production of Indian superior bears to that of Indian inferior kerosene, we obtain an average of Rs. 3-14-8 as the equivalent of world parity price at Indian ports on this basis.

33. An equivalent of world parity price at Indian ports based on the freight from Batoum may appear at first sight to indicate the level at which under present conditions the price of imported kerosene would be fixed in the Indian market. It might even be thought that since the Royal Dutch Shell Group and the Anglo Persian Oil Company are in a position to transport their supplies from nearer sources, the import price might be somewhat smaller than this. It must be admitted that an estimate framed on these lines has an appearance of fairness which cannot fail to make a strong appeal to the consumer. But in determining the equivalent of world parity at the Indian ports, the question with which we are concerned is not necessarily what is a fair price, but what is the price at which actually imported oil would be landed in India if normal conditions prevailed. Under ordinary competitive conditions, however, the level of prices is determined by the highest price which it is necessary to pay in order to secure an import of oil sufficient to supply the excess of the demand in India over the indigenous production. The home supply stands at between 35 and 40 per cent. less than the total home demand. If we were assured that the supply of Russian oil would in all circumstances be sufficient to meet this deficiency without recourse to American import, it might be possible to accept such a calculation of the equivalent of world parity at Indian ports. We have, however, practically no information as to the supply of Russian oil or of the prospects of the output of kerosene increasing or decreasing in the existing industrial conditions of the country. From the joint representation of the Indian Oil Companies to the Government of India it appears that the Standard Oil Company of New York have a contract with the Soviet Government for three years for an annual supply of 150,000 tons of kerosene. There is also stated to be a further contract for 60,000 tons annually for six years, but it is not known whether this contract is for kerosene or for some other product and whether it is to be sold in India or some other Eastern market. Even supposing that the supplies under both contracts are for kerosene intended for the Indian market, the total supply would not equal the total annual import of kerosene by the Standard Oil Company of New York into India. It appears, therefore, that some American oil must still be imported by the Standard Oil Company of New York, and if there were no price war, the price of this landed at Indian ports would normally determine the level of Indian prices.

34. It may be argued that if normal conditions prevailed, sufficient oil might be imported into India from nearer sources of supply such as Persia or the Dutch East Indies to meet the whole of the Indian demand for imported oil and if this were so, a lower

Possibility of changes in supply or world marketing conditions.

freight than from the Gulf ports would determine the level of import prices. We have no information as to the sufficiency of oil from these sources to meet the total requirements of the Indian market. But the question cannot be settled merely with reference to the quantity of oil produced in these areas. Perhaps almost as important as the question of the sufficiency of the supplies from nearer ports to meet the requirements of Indian markets, is the effect of fluctuations in the relative market conditions of India and other countries. The business of these large Oil Companies is world wide and any considerable change in the relative levels of current prices may in normal circumstances have unforeseen results on the import into India of foreign oil. If the level of prices in India is low it may pay foreign Companies operating in these areas to divert to some extent the sale of kerosene from India to other and more favourable markets. Reactions of this nature might well for a time restrict the import of foreign oil from sources other than America. In the speculative conditions which prevail in the oil trade, the possibility must always be reckoned with of India having to meet some part of the deficiency in her oil supplies from America which at present is the chief source of oil production in the world. It appears to us, therefore, that in normal conditions American export prices and freights from America may not unreasonably be regarded as the determining factor in the level of Indian kerosene prices and without extensive investigation into the conditions governing the world markets for kerosene it would be unsafe to accept what may prove to be entirely an arbitrary assumption as to the allocation of particular supplies of oil among particular markets. On the evidence before us we are therefore of opinion that Rs. 4-8-4 per unit of 8 gallons should be taken as the equivalent of world parity at Indian ports.

35. We think it necessary to explain that whichever view is taken of the equivalent of world parity price at Indian ports, the figure arrived at is not to be regarded as re-

World parity at Indian ports not necessarily a fair selling price.

presenting our view of what constitutes a reasonable or, as we have termed it in other enquiries, a fair selling price. The determination of a fair selling price implies an examination of the costs of production and the fixation of overhead charges and reasonable profit for the manufacturer. When the import price is much below the fair selling price of an indigenous product so determined, it may be necessary to grant assistance by raising the import price by means of protective duties to the required level. In the present enquiry no question of protection in this sense arises and for our present purpose it is sufficient to ascertain the level at which in normal conditions, that is, if there were no price war, prices of kerosene would stand in India. Where there is a deficiency in the indigenous production as compared with the Indian demand, the level of prices must normally be determined by the highest price at which it is necessary to import foreign oil in appreciable quantities. For if the Indian Companies sold at a lower price dealers in indigenous oil would raise their price to the level of that of imported oil. Whether

this price constitutes a fair selling price for Indian producers is a question which for our purpose it is unnecessary to consider and on which therefore we express no opinion.

36. The question of current prices is not free from difficulty. In order to render these comparable with the equivalent of world parity prices at Indian ports we think it necessary to take the prices of kerosene *ex* ocean installation.

Kerosene is, however, sold in two different grades, superior and inferior, and the relative proportions of these vary for the different Companies in different areas and at different times. Further the war has affected prices in different degrees in different parts of India. In Burma prices have not been affected and in Chittagong but slightly. In Calcutta reductions have been on a much smaller scale than in Bombay where competition has been keenest. Thus while in Bombay reductions in November reached a total of Rs. 2-8-0 per unit, in Calcutta they never exceeded Re. 1-4-0. It is, therefore, difficult to obtain an average price which may be considered truly representative. Since all Companies in determining their prices, follow the levels established until recently by the Kerosene Pool and now by the Burmah Shell Oil Storage and Distributing Company of India, Limited, it appears reasonable for the purpose of determining the general question of the relation of current prices to the world parity price to take the current weighted average price for oil (superior and inferior) sold through the agency of the Burmah Shell Company throughout India (including Burma), but excluding the economic areas of the Attock and Assam Oil Companies. As we have already stated the Burma Shell Company is the selling agency both of the Asiatic Petroleum Company and the Indian Companies which formerly constituted the Kerosene Pool. The Anglo Persian Oil Company's products are now also sold through this agency. Its prices therefore represent the prices both of indigenous kerosene and of that imported by the Royal Dutch Shell Group and the Anglo Persian Oil Company. In considering the financial position of the different Companies, we have, however, taken the actual prices received by each Company. This general price has been given to us at Rs. 3-10-9 for the whole of India excluding the economic areas of the Attock and Assam Companies where owing to the railway freight a higher price is obtainable. The figure has been worked out on the basis of the current prices of the Burmah Shell Oil Storage and Distributing Company of India, Limited, the distribution of oil being taken as in the months of January and February, 1928. The difference between this and the equivalent of world parity at Indian ports, *viz.*, Rs. 4-8-4 is 13 annas 7 pies per unit. If for the purpose of estimating the equivalent of world parity at Indian ports the freight and incidental expenditure from Batoum were taken, the figure would stand at Rs. 3-14-8 and the difference between this and current prices would be 4 annas per unit of 8 gallons. Whichever standard is adopted, the present price of kerosene in India is below world parity and it becomes necessary therefore to consider the second of our terms of reference.

CHAPTER III.

Second term of reference.

37. We have now to consider whether it is in the national interest that protection should be given against the dumping of imported kerosene. The term dumping is generally defined as the sale of imported merchandise at a price f.o.b. which is lower than the prevailing market or wholesale price in the country of production. It is often employed in an invidious sense to connote unfair or cut throat competition and its use appears to be liable to some extent to prejudice public opinion. In the present case the low prices against which protection is sought are the result of a price war initiated by a foreign Company with the active co-operation of a large section of the Indian industry. In these circumstances, dumping in the ordinary sense of the term could hardly be said to be established. This is an aspect of the case with which we are not required to deal. Under our terms of reference dumping of kerosene is defined as the sale of imported kerosene at prices below world parity and the question which has been referred to us for investigation is the advisability of "safeguarding" the Indian industry against dumping as so defined. We have found in the last Chapter that the current prices of oil in India are below world parity. The oil imported into India by the Royal Dutch Shell Group and the Anglo-Persian Oil Company is sold at present at the same price as indigenous oil. It follows therefore that dumping is established. The case for safeguarding an industry must depend primarily on the extent to which the national interest would be adversely affected if no assistance were given. In considering this question it is unnecessary to examine the applicability of the conditions laid down in paragraph 97 of the Fiscal Commission's report. The main issue for consideration is the effect of the dumping of kerosene on the various interests involved and it is to this issue that we propose to direct our attention. So far as this enquiry is concerned, it appears that the national interest may be considered under three heads, *viz.* (1) the national interest in maintaining the Oil industry and in utilizing the country's oil resources to the greatest advantage, (2) the interest of the consumer and (3) the interest of Government.

38. It is perhaps unnecessary to refer save briefly to the national importance of the Oil industry. Aeroplanes and mechanical transport play so great a part in modern military operations that no country can afford to be entirely dependent on other countries for its petrol and fuel oil supplies. On the other hand, India produces some 70 per cent. of the kerosene and the whole of the petrol requirements of the country. Unless it is established that the present price war will result in a serious diminution of the production in future or in the waste of existing resources by the closing down of

National interest in Oil industry.

all or some of the Oil Companies, it appears to us that on the ground of national importance no case for protection can be established. Our first task must therefore be an examination of the financial position of the Oil Companies.

39. The Burmah Oil Company have, on more than one occasion, stated that their resources are sufficient to enable them to withstand the effects of the price war and that they are not therefore applicants for protection. They claim however that in the matter of protection there shall be no differentiation between the larger and smaller indigenous producers other than such as may arise from their different volume of production. Their claim to protection is therefore contingent and it is necessary in the first instance to examine the financial position of the smaller Companies. All Companies have furnished us with their cost accounts. The information has, however, been given in confidence and cannot therefore be disclosed in our report except in so far as representatives of the Companies have consented to its publication. We have, however, carefully examined the costs, and used them to check the general accuracy of the results which we have obtained by applying a method of estimating the financial position of the industry somewhat different from that employed by the Board in other enquiries. Our object is to ascertain the financial position of the Oil Companies at present and in the future. The basis of enquiry is the last available balance sheet and profit and loss account of the Company. By applying the difference between present prices for all petroleum products manufactured by the Company and those current in the year under consideration to the production of that year, a general idea is obtained of the reduction in profits which has taken place. This method assumes that the whole production is sold in the year and that stocks of products remain constant. In the case of some Companies, stocks are valued at below market price. Any variation in stocks will therefore to some extent vary the profits. But we consider that such variation is not likely to affect seriously the validity of our conclusions. It also assumes—

- (1) That production remains constant and that the relative proportion of the different refined products remains unchanged.
- (2) That future prices remain on the present level.
- (3) That expenditure continues unchanged, no economies being possible.

The correctness of these assumptions will be considered in connection with the results obtained.

40. The profit of this Company as shown in the Balance Sheet for the year 1926 was Rs. 20,67,523. This was the nett profit after meeting all charges for depreciation and income-tax. It should be explained here that owing to the speculative nature of the business and the fact that the oil is a wasting asset it is the custom of most Oil Companies to charge to revenue account all expenditure

Indo-Burma Petroleum
Company.

on prospecting, drilling new wells and generally on the development and extension of their property in the oil fields. We have examined the prices received by the Indo-Burma Petroleum Company in 1926 and compared them with the prices prevailing in March, 1928. Allowing for a reduction in income-tax resulting from smaller profits, had those prices prevailed in 1926, the Company would still have made a profit. In 1926, the important Lanywa river bed reclamation scheme was commenced. The works consist of a constructed sand bank reclaiming an area from the bed of the Irrawaddy river on which it is proposed to drill oil wells. Expenditure on this amounting to Rs. 5 lakhs was charged to revenue account in 1926. In 1927, expenditure on this account has been capitalized and it is obvious therefore that on the results of 1926 no claim for protection could arise on the ground of present prices. For it would have been possible for the Company to continue all its prospecting and development work without affecting its financial position, save in so far as a reduction in the rate of dividend might have been necessitated. Since 1926, however, the production of crude has been very much reduced standing in 1927 at 11,495,259 gallons against 13,889,749 in 1926. It may therefore be argued that the position has changed and that any conclusion formed on the balance sheet of 1926 would not hold good for present day conditions.

41. We have, therefore, examined the case on the basis of the figures and production for the year ending the 31st December, 1927.

Accounts for 1927. The prices for that year were affected by the price war during the last three months. Taking the first nine months of the year we find the prices for the principal products compared with the prices obtained in March as follows:—

Products	Gallons.	Price per gallon ex- refinery 1st 9 months. 1927.	Price March 1928.	Difference.	
		Rs. A. P.	Rs. A. P.	Rs.	A. P.
Superior kerosene .	2,187,253	0 7 7·54	0 4 7·70	0 2 11·84	
Inferior kerosene . .	2,942 270	0 5 11·94	0 3 7·23	0 2 4·66	
Wax	719,312	0 14 11·8	0 14 11 8		
Petrol	1,459,495	0 5 6·14	0 5 1·96	0 0 4·18	
Turpentale .	107,554	} prices unchanged.			
Lubricating oil . . .	391 988				
Jute Batching oil . .	202,317				
Diesel fuel	430,580				

Applying the difference in price to the production of the first 9 months of 1927, the reduction in profits amounts to approximately

Rs. 8-80 lakhs. Comparing the prices for each of the remaining three months of the year, with those in March 1928 and adopting the same method of calculation we obtain the following results in round figures:—

	Loss.	Gain.
	Rs.	Rs.
October	9,000	...
November	25,000	...
December . . . . .	...	44,000
	<hr/>	<hr/>
TOTAL	34,000	44,000
Nett result	plus Rs. 10,000.	

The nett result for the year, therefore, had the March prices of 1928 prevailed, would have been a reduction in profits of about Rs. 8 $\frac{3}{4}$ lakhs. The profit and loss as shown in the balance sheet for 1927 amounted to Rs. 8,02,103. This sum is after deducting on account of income-tax and super-tax Rs. 4,86,095. Income-tax however is not an item of expenditure but an appropriation of profit. It has been pointed out to us that under the rules income-tax may be assessed on a sum larger than the profit as shown in the Company's books. Even so, it is clearly an item which must be excluded in arriving at the profit of the Company. Allowing for this, it appears that had the prices of March, 1928, prevailed throughout 1927, the profit of the Company would have been about Rs. 4.13 lakhs from which it would have been necessary to pay such income-tax as was assessable.

42. The position is, however, more favourable than this. There has recently been a decrease in the price of superior kerosene by 4 annas per unit and an increase in the price of inferior by a similar amount. It is impossible to forecast the result of this on the demand for the two grades of kerosene but on present figures this would leave their position unchanged. Further, we have been informed by the representative of the Burmah Shell Company that rebates and commissions are being reduced and that the gain therefrom will be equivalent to an increase in price of 2 annas per unit in the areas outside Burma and Chittagong. This cannot be without effect on the prices obtained by the Indo-Burma Petroleum Company and if the full effect of this measure manifests itself, on the basis of 1927 sales in those areas, an increase in the profit of the Company of about Rs. 67,800 should occur.

43. There is another item on the expenditure side to which reference must be made. In the autumn of 1926 unprecedented floods completely destroyed the roads, pipe lines, bungalows, godowns and many of the derricks of the Company in the Indaw field. Expenditure on this account was Rs. 2.21 lakhs in 1927. This item is of a non-recurring nature and in estimating the future position should be excluded

from consideration. The profits of the Company would on this account be increased by Rs. 2.21 lakhs. Another reduction in expenditure should be made on account of the reduction in the rate of crude purchased from the Hessford Development Syndicate. A reduction in price of about Rs. 2 per barrel has been made which on the 1927 production of the Syndicate would mean a decrease of some Rs. 66,000. We think it, therefore, probable that in spite of the price war, the Company, if it considers it advisable, should be able to carry on all development work on the same scale as in 1927 and yet make a profit of about Rs. 7 lakhs. It should here be noted that the expenditure on the Lanywa reclamation scheme has in 1927 been charged to capital account.

44. As regards the property of the Company, the balance sheet for 1927 reveals a very strong position. The following figures (in lakhs) show the extent to which assets have been written down :—

—	Expended to 31st December 1927.	Value in balance sheet.
	Rs. lakhs.	Rs. lakhs.
Properties, plant, oil wells, etc. . . .	189.3	37.9
Refineries and buildings	64.16	12.12
Tankers and launches	8.99	1.54
Indian installations	20.58	5.6

Cash in hand and in Bank amounts to Rs. 3.26 lakhs.

On these figures we cannot avoid the conclusion that this Company is in an exceptionally strong position and on the basis of existing circumstances, its claim to protection cannot be upheld.

45. This Company's balance sheet is drawn up for the year ending 31st July. We proceed on the balance sheet and profit and loss account for the year 1926-27, which was unaffected by the price war. We should explain here that until 31st December, 1927, the Royal Dutch Shell Group and the Burmah Oil Company compensated this Company fully for any losses incurred on account of the price war by paying the full Pool prices existing before the war commenced. The following Table shows the production for that year and the prices of the Company's products as compared with those obtained in the first three months of 1928. Asphalt has been excluded as its manufacture has been discontinued. The price figure of the three months, January to March, represents the Company's estimate of prices during this period on such information as is available. The Company sells its products through the Burmah Oil Company's organisation and full information has not yet been received as to the price realised. Generally speaking, the average for these three months and the March prices are almost

the same, and for practical purposes we can take the Company's estimate as equivalent to March prices.

	Production Gallons.	Price ex-refinery including excise duty on kerosene and petrol, 1926-27.	Price first three months, 1928	Difference.
Kerosene	16,128,267	Annas. 8'42	Annas. 5'08	Annas. 3'34
Petrol	2,313,876	11'29	9'51	1'78
Wax	899,936	16'19	15'07	1 12

Applying these reductions in price to the production, we obtain a total decline in profit of Rs. 36·87 lakhs or about £276,000.

46. The profit and loss account for the year 1926-27 showed a profit of £131,889 after deducting interest on debenture stocks and depreciation. There were, however, certain appropriations from this sum before it was carried to the balance sheet and these

Appropriations to sinking funds. it is necessary to discuss. £25,000 were carried to the sinking fund account for the first Debenture stock and £42,000 to the sinking fund account for the second Debenture stock. On examining the debenture trust deed we find that the payments on account of sinking fund for the second Debenture stock is compulsory only to the extent of the profits of the Company. If, as is claimed, owing to the kerosene price war, no profits are being made, in estimating the ability of the Company to continue its operations, this payment must be excluded. It is true that the second debentures must be redeemed in 1936. On the other hand, the balance sheet for 1926-27 shows that already debentures to the value of £580,000 have been paid off and to this extent the value of the property has increased. We see no insuperable difficulty in floating a fresh loan, should the necessity occur to pay off the second debentures still outstanding, which in July 1927 amounted to £432,057. The other appropriation of £25,000 to reserve and contingent reserve account is one which in times of stress would normally be discontinued.

47. For our present calculations then we take the profit for the year 1926-27 at £131,889 less the sinking fund for the first debenture stock, *viz.*, £25,000, or £106,889. Had

Debit balance. the prices in the first three months of 1928 been in force in 1926-27, there would have been a reduction in profit of £276,000, leaving a debit balance of £170,889. Since, however, income-tax would not be payable save on a profit, the amount, *viz.*, £20,735 English income-tax and Rs. 168,683 or about £12,600 Indian income-tax must be deducted. The debit balance would then be reduced to £137,000. As we have already explained, in considering the financial position of the Indo-Burma Petroleum Company, there are other price alterations which must be considered.

48. The recent increase in inferior and decrease in superior kerosene rates has effect only in the areas of sale other than Burma and Chittagong. Assuming the proportion

Adjustments. of inferior and superior kerosene remained the same as in the first eight months of 1927, the effect of this variation in rates would be an increase in profits of about £5,500. Finally if, as explained by the representative of the Burmah Shell Oil Storage and Distributing Company of India, Limited, the contemplated reduction in rebates and commissions is equivalent to a further increase in price of 2 annas a unit over the price in March, the British Burma Petroleum Company would benefit to the extent of nearly £19,000. It appears, therefore, that if these adjustments are made, the British Burmah Petroleum Company's debit balance would be reduced to about £112,500. We have already referred to the fact that the Royal Dutch Shell Group have agreed to compensate the Burmah Oil Company, the British Burmah Petroleum Company, the Assam Oil Company, and the Attock Oil Company to the extent of half the difference between Chinese prices and Indian prices on their contributions to the Pool. It is impossible at this stage to determine what this compensation would amount to as the course of prices in China cannot be foreseen. We have been informed by the representative of the Asiatic Petroleum Company that on account of reduced selling prices in China, probably no compensation will become due on account of this year's trading. The Burmah Oil Company roughly estimates that between January and June the Royal Dutch Shell Group might pay in all £80,000 on this account. On the basis of sales in India other than Burma and Chittagong it appears that the British Burmah Petroleum Company might possibly receive £14,000* on this account on the supposition that the Assam Oil Company and the Attock Oil Company receive compensation for sales outside their economic spheres only. The debit balance would then be reduced to about £98,500 per annum.

49. It is now necessary to consider for what period the resources of the British Burmah Petroleum Company will enable it to continue operations. In the five months August to December 1927, the Company received the following prices for its products as compared with 1926-27—

Product.	Production Gallons.	Price August-December 1927.	Price 1926-27.	Difference.
		Annas.	Annas.	Annas.
Kerosene	6,420,401	8·91	8·42	+·49
Petrol	847,927	9·77	11·29	—1·52
Wax	446,613	15·07	16·19	—1·12
Asphalt	65,213	6·66	7	—·33

* Subsequently we have been informed that under the arrangements for compensation, the Burmah Oil Company has also agreed to pay to the contributing Companies in the Kerosene Pool an additional 50 per cent. of the difference between Chinese and Indian prices. The amount of compensation payable to the British Burmah Petroleum Company may therefore be somewhat larger than we have estimated here.

Applying these differences in the price to the population for the period a nett gain of some Rs. 80,000 or about £6,000 results. Assuming that the profit in the period August to December was in other respects the same as in 1927, the total profit for that period would be five twelfths of £131,899 *plus* £6,000, or about £60,000. For the remainder of the year the loss would be roughly for half the period at the rate of £137,000 per annum and for the remainder at the rate of £112,500 per annum, giving a loss of about £73,000. The nett loss for the year would, therefore, be about £13,000. Against this has to be set the compensation paid by the Royal Dutch Shell Group for the period of seven months January to July. On the Burmah Oil Company's estimate this would amount to some £8,000, giving a debit balance of about £5,000 to which the sinking fund for the first debentures (£25,000) must be added. The debit balance, therefore, will be nearly £30,000.

50. The liquid assets of the British Burmah Petroleum Company were estimated by the Chairman at the annual meeting for 1926-27 to exceed liabilities by £450,000.

Liquid assets.

A portion of this however must be utilized as working capital and we consider it safer to adopt a conservative attitude and take only the cash and Government securities as available to meet any possible deficit. Cash on 1st July, 1927, amounted to £37,492 and Government securities (at cost) to £292,283 or in all some £330,000. Since the balance sheet was issued £46,700 has been paid by way of dividend and £58,000 in payment of debentures cancelled. There is left, therefore, £226,000 from which has to be met the debit balance for 1927-28, *viz.*, £30,000, and losses in the future at the rate of £98,500 if the price war continues. Allowing for loss of interest on the securities sold, it would be possible on these figures for the Company to continue operations for rather less than two years after July, 1928, without raising any fresh loan.

51. As regards the present finances of the Company we cannot do better than quote from the lucid exposition of the Chairman

Present financial position of the Company at the last annual general meeting of Company.

“ Our debenture debt has been substantially reduced. Our plant and equipment have been consistently kept up to date and in good working order, so for a time our capital expenditure can be reduced to a minimum without injury to our undertaking. Adequate provision has consistently been made for depreciation and we have followed the sound and prudent course of writing off each year to revenue, drilling expenditure on our producing field. Last year the amount so written off was £98,000. Nor does our balance sheet make a bad showing. The fluid assets—sundry debtors, investments in Government securities, cash and stocks of products—exceed sundry creditors and liabilities by about £450,000. We are

in a position then to resist a certain spell of adversity without catastrophe ”.

In amplification of this statement we may add that of the total expenditure of Rs. 301 lakhs, Rs. 196 lakhs have been written off and although, as with all Oil Companies, a proportion of the assets are now valueless, the position disclosed is distinctly satisfactory, while, as we have already stated, about £580,000 debentures have been paid off.

52. It may occasion some surprise that the financial position of the British Burmah Petroleum Company is so much more unfavourable than that of the Indo-Burma Petroleum Company, especially in view of the fact that the crude production of the former in 1926-27 stood at 23 million gallons while that of the latter in the year 1927

stood at about 13½ million gallons. The reason is to be found mainly in the method of capital finance. While the Indo-Burma Petroleum Company is financed mainly by ordinary and preference share capital, the British Burmah Petroleum Company has issued debenture stock to the extent of £1,049,000 of which £544,119 is still uncanceled. The interest on the debenture stock amounts to £45,000, while the first debenture sinking fund claims £25,000 annually. If then it had been possible to issue share capital in place of debenture stock, the position of the Company as we have estimated would have been better by £70,000 annually. It may be that the British Burmah Petroleum Company had no option but to finance their operations in this manner, but it certainly appears that the issue of debenture stock involving the annual payment of interest and sinking fund charges is not a suitable method of finance in a highly speculative industry where profits even in the most favourable circumstances must vary in the ever changing relation of world production to demand.

53. Our estimates have been drawn up on the assumption that expenditure remained on the same scale as in 1926-27 and that there

Economies. has been no restriction of prospecting and development work. In view of the effect on the Company's finances of the fall in the world price of all petroleum products aggravated by the price war in India, we asked the Company to indicate to what extent economies or restriction of expenditure have been recently effected. From the Company's reply it appears that excluding the expenditure under 'Casing' which is very irregular and for which the expenditure in any one month cannot be taken as typical, the expenditure on drilling for March stood at about Rs. 38,000 as compared with the average monthly expenditure of Rs. 89,000 during the 10 months January to October, 1927. This is equivalent to a reduction in expenditure of about Rs. 6 lakhs a year. For the same periods expenditure in the field on producing wells and general expenditure has declined by about Rs. 19,000 a month or Rs. 2,28,000 a year. It is interesting to observe that the consumption of crude oil as fuel has declined

very considerably. This we understand to be due largely to the utilization of gas as fuel from the Company's new gas well in the Singu field. It is expected that gas from this well will be available as fuel for some years. In the refinery, output for March is some 5 per cent. less than the average month for 1927, and there is a noticeable increase in the amount of petrol and wax produced. The average monthly output of these two products in 1926-27 compares with the production for March 1928 as follows :—

	Petrol gallons lakhs.	Wax gallons lakhs.
Average monthly production 1926-27 . .	1·92	·74
Production in March 1928 . .	2·18	1·02

Neither of these products are affected by the price war. Reductions have been made in the refinery which would amount to a total of about Rs. 2·16 lakhs a year on the March figures. Similarly, in the Rangoon office expenditure has been reduced by about Rs. 28,000 annually while we are informed that from June next retrenchment in the covenanted staff will reduce refinery expenditure by Rs. 5,400 a year and Rangoon office expenditure by about Rs. 18,000 a year. The figures of one month, even after excluding variable items of expenditure, cannot be safely taken as typical of the whole year. They afford, however, a general indication of the extent to which reduction in expenditure may safely be made.

54. On these figures the total restriction of expenditure amounts to about Rs. 11 lakhs a year or about £82,000. Assuming that no payment is made into the second debenture sinking fund, we have estimated the debit balance of the Company at £98,500 per annum on the expenditure of 1926-27. With the restriction of expenditure undertaken by the Company, this might perhaps be reduced to some £16,500. They are, however, as we shall show later, indications that the world price of petroleum products will gradually rise and the Company will have the advantage of any increase in the world price of its products other than kerosene. Even if no compensation becomes payable by the Asiatic Petroleum Company and the Burmah Oil Company under the terms of the agreement regarding Chinese prices, we have little doubt that the British Burmah Petroleum Company will be able to continue its operations though its development work will be somewhat restricted if, as is possible, the price war continues for a considerable time.

55. The balance sheet of this Company is not published till the end of June. The accounts are made up in England and we have not therefore been able to obtain financial results later than those shown in the balance sheet and profit and loss account for the year ending the 31st December, 1926. Since those accounts were published, the fortunes of the Company have undergone a considerable change. Oil has been struck in much increased

quantities, and in the year ending 31st December, 1927, the production of crude increased by about 71 per cent. It is believed that in the immediate future the production will not decline and may increase. The effect of a large increase in the production of crude oil on the finances of the Company cannot be estimated without a very detailed examination of costs, which is not contemplated in this enquiry, but a general idea of the present financial position and prospects of the Company may be obtained in the following manner. In 1926 the profit in India was £48,361. Owing to the increase in production, the expenditure per unit produced has very much declined. After examining the cost accounts which have been produced, we are satisfied that had the expenditure in 1926 been at the same rate as in 1927, on the production of the former year expenditure would have decreased by about Rs. 11 lakhs excluding from account London expenses, interest charges and depreciation. On the 1927 scale of expenditure per unit, profits in 1926 would thus have been increased by about £83,000 giving a total profit of £131,000. In 1927 the output of crude increased by about 71 per cent. from 156,553 barrels to 266,690. The whole production, however, was not dealt with at the refinery. Refinery throughput increased from 6,187,746 gallons in 1926, to 8,020,771 gallons in 1927, or by about one third. Assuming the same prices as in 1926, profits should have, therefore, risen by about one third from £131,000 to about £175,000. This calculation assumes that the relative proportions of the different products remain unchanged. Although the proportion has varied considerably, the changes have largely neutralized each other and the average price per gallon of petroleum product if the price of 1926 are applied to the production of each year, remains about the same.

56. It is now necessary to see to what extent the decline in prices has affected the financial position of the Company. Prices in 1926 as compared with March, 1928 were as follows:—

Product.	Price per gallon 1926.*	Price per gallon, March, 1928.*	Difference.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Superior kerosene . . .	0 11 9	0 8 9	0 3 0
Inferior „ . . .	0 9 7	0 5 6	0 4 1
Petrol	1 1 6	0 13 10	0 3 8
Lubricating oil . . .	0 14 11	0 8 1	0 6 10
Fuel oil	0 6 8	0 5 7	0 0 8

As in estimating profits for 1927 the 1926 prices have been assumed, the difference between those prices and the March, 1928, level of

*All figures rounded to nearest pie. Calculations therefore only approximate.

prices when applied to the 1927 production from the refinery will indicate the reduction in profits which would have occurred in that year had the present prices been in force. The refinery output in 1927 stood as follows:—

	Gallons.
Superior kerosene	1,496,826
Inferior kerosene	862,686
Petrol	1,872,179
Lubricating oil	758,562
Fuel oil	2,800,482

A total reduction in profits of Rs. 13·7 lakhs is obtained. This, however, is subject to the increase in price of kerosene since March estimated at about 2 annas a unit of 8 gallons which would be equivalent to about Rs. 35,000. On the other hand, the increase in price of inferior and decrease in price of superior by 4 annas a unit would result in a possible further loss to this Company of about Rs. 20,000. The Company also estimates that it will be seriously affected by the reductions in railway rates on kerosene and other products which were due to come into force from June, 1928. These reductions apply only to oil products carried more than 300 miles. While, therefore, the rates paid by the Company are hardly affected, its prices, which are based on the Karachi prices *plus* freight, will be considerably reduced. The reduction in profits on this account is estimated at Rs. 7·46 lakhs in a full year or Rs. 4·97 lakhs between May and December, 1928. On these figures the total reduction in profits resulting from reduced prices would be about Rs. 21 lakhs or £158,000*.

57. We have estimated the profits on the basis of the 1927 production at about £175,000. On the assumption that prospecting and development work continued on the same scale as in 1926, in which year expenditure on this account reached its maximum, the credit balance would be £17,000. There is a further adjustment to be made. The amount of crude treated at the refinery in 1927 was 8,020,771 gallons. The total amount produced was 10,667,600. For the difference (2,646,829 gallons) neither the cost nor the value has been taken into account in our calculations. Clearly some value above the bare cost must be placed on this crude. Assuming that this additional amount of crude had been refined, it may be taken that the nett profits would have been increased in the proportion which the throughput in 1927 bore to their additional crude, *i.e.*, $\frac{2,646,829}{8,020,771} \times 17,000 = £5,609$. With increased throughput there would have been a decrease in refinery costs. The amount of this decrease we cannot estimate without a detailed examination of costs for which the time at our disposal is not sufficient. Taking the above figure as representing the minimum profit which could be made on this excess crude petroleum, profits would be increased

*In 1928 some £23,000 less.

to about £23,000 subject to appropriation for depreciation and London expenses. These amount to about £75,000 in all leaving a debit balance of some £52,000. Profits in 1928 would be reduced by some £23,000 less since the new railway rates come into force only from June, 1928, and on this calculation the debit balance would stand at about £29,000.

58. This may appear to be a result somewhat unfavourable to the Company. It is necessary, however, to point out that as the

throughput in the refinery increases, there should be a substantial decrease in the cost per unit of crude oil treated, while it is probable that the progress in extracting the maximum value of the refined products from the crude, referred to by the Chairman of the Company at the last annual meeting, will be continued. Expenditure on drilling appears to have reached its maximum in 1926, and under this head some reduction is shown in 1927. With the present increased production it is not unreasonable to suppose that in the immediate future this expenditure may be somewhat less. It is not improbable also that a further increase in production may occur and even if the present tendency to an increase in the world price of petroleum products does not continue, the prospects of the Company are not unfavourable. The balance sheet reveals a strong position. Field expenditure has been written down by £150,000 to £642,000, refinery and other expenditure by £138,000 to £677,000. Stores stand at £202,000, stocks of products at £50,000 and sundry debtors at £68,000. Cash stands at £35,000. Against these assets sundry creditors amount to only £80,000 and unclaimed dividends to about £250. There is a share premium reserve of £75,000. As regards liquid assets, therefore, the Company is favourably situated and should be able to face a period of depressed prices resulting mainly from world conditions with equanimity. After careful consideration of all factors we are of opinion that the future development of the Company's property would not be affected by the refusal of Government to grant protection.

59. There is one matter, however, to which we desire to direct the attention of Government. The reduction of railway freights

on kerosene, petrol and fuel oil which came into force in June, 1928, will, as has been pointed out, result in heavy loss to this Company, in as much as the freights paid by it being mainly within a 300 mile radius will be unaffected. In a full year the loss thereby resulting has been estimated to amount to about Rs. 7.46 lakhs. It appears somewhat anomalous that of all the Oil Companies the Attock Oil Company alone should be adversely affected by Government action, since the price war commenced. There may be administrative difficulties which have not been brought to our notice, in removing this handicap which undoubtedly seriously affects the Company's position in competing with foreign oil, but the matter is one which we recommend should be carefully considered by Government.

60. The latest available balance sheet is that for the year ending 31st December, 1926. The profit and loss account for that year shows a trading profit of £59,737 after charging administrative expenses and depreciation, from which has to be deducted interest (£27,527) and Directors' and Auditors' fees (£2,605), leaving a total of £29,605. The production for that year and the prices as compared with March, 1928, are as follows:—

Products.	Production gallons.	Price per 100 gallons.		Difference per 100 gallons.
		1926	January to* March, 1928.	
Inferior kerosene	9,537,794	46·4	28·2	—18·2
Superior kerosene	75,323	60·8	62·2	+1·4
Petrol	3,039,426	57	46·9	—10·1
Jute batching oil	456,093	47·7	44·6	—3·1
Fuel oil	193,434	12·8	14·1	+1·3
Sundry oils	173,722	28	24·7	—3·3
Wax	998,937	83·9	59·2	—24·7

Applying these differences to the 1926 production, the reduction in profits would be approximately Rs. 23 lakhs. As against this has to be set an increase of about 2 annas a unit in the price of kerosene since March, which is equivalent to additional receipts of about Rs. 1½ lakhs and the increase in inferior and decrease in superior kerosene prices by 4 annas a unit equivalent to a further increase in receipts of about Rs. 3 lakhs. The total decrease in profits would thus amount to some Rs. 18½ lakhs or £138,750. Profits in 1926 were £29,605. The accounts, however, were maintained on the basis of 1s. 4d. = Re. 1. With the rupee at 1s. 6d. the profits would be just over £33,000. There would, therefore, on this calculation be a debit balance of about £105,000. We understand that the compensation to be paid by the Asiatic Petroleum Company to the Indian Companies roughly estimated by the Burmah Oil Company at about £160,000 a year will be assessed only on sales outside the economic area. On the basis of production in this area the compensation would amount to some £5,000 a year.† The annual debit balance would therefore amount to about £100,000.

61. Since the Burmah Oil Company took over the management of this Company in 1921, expenditure on development has been on an ambitious scale and at present far beyond the means of a Company capitalized on so modest a scale. If the Assam Oil Company stood alone we have little doubt that even

*Weighted average of sales inside and outside economic area.

†Somewhat more if as we have recently been informed, the Burmah Oil Company also contributes an equal share of compensation.

if no price war had arisen, it would not have been able to carry on operations on the present scale without extensive re-organization. The connection between the Assam Oil Company and the Burmah Oil Company is very close. In January, 1921, control of the Assam Oil Company passed to the Burmah Oil Company, shareholders being offered by the latter Company £2 cash for each Assam share or one Burmah Oil Company's share for every $4\frac{1}{2}$ Assam shares. The Burmah Oil Company at present holds 90 per cent. of the Assam Oil Company's issued share capital (£400,000). At the purchase price of £2 per share this represents an investment of some $\frac{3}{4}$ million pounds sterling. Since the Burmah Oil Company assumed control, a very active policy of prospecting and development has been pursued. Expenditure on this account which in the three years previous to the assumption of the control by the Burmah Oil Company had averaged little over £30,000 a year, in 1926 reached the figure of £168,000 and for the first nine months of 1927 amounted to £207,000. For the purpose of these operations the Burmah Oil Company has advanced to the Assam Oil Company a sum of approximately 1 million pounds. The Burmah Oil Company, therefore, has an interest in the Assam Oil Company to the extent of about £1 $\frac{3}{4}$ millions and practically the two Companies are identical. It is clear that the policy of the Burmah Oil Company has been up to the present time to develop and expand the Assam oilfield to the greatest possible extent. It is a reasonable conclusion, therefore, that the future prospects of the Assam oilfield are regarded as promising and indeed in the application of the managing agents of both Companies to this Board, the Assam oilfield is described as one "of which perhaps alone of all the Indian fields it can be said with confidence that its period of greatest productivity still lies in the future". We have been told that "the Burmah Oil Company itself suffering serious losses as a result of the rate war, will be unable to render assistance". We observe, however, that notwithstanding the price war the Burmah Oil Company has recently declared a dividend at the rate of 20 per cent. per annum for the latter half of 1927, while its £1 shares are quoted in the market at £4 $\frac{1}{4}$. There should, therefore, be no difficulty in either floating a loan or issuing new shares sufficient to enable the Burmah Oil Company to continue assistance. It is, therefore, perhaps not unreasonable to suppose that the Burmah Oil Company having already a stake of some £1 $\frac{3}{4}$ millions in the Assam Oil Company, will continue the development of a field where a considerable increase in production has already been obtained. We consider, therefore, that no case has been made out for Government assistance to the Assam Oil Company.

62. The financial position of the other Companies requires no detailed investigation. The Hessford Development Syndicate produces at present not even 1/200th part of the total crude oil output of India. The Syndicate is a private Company at present engaged almost entirely in prospecting and exploring work and has only 7 producing wells. It has no refinery and sells its crude oil

Hessford Development
Syndicate.

to the Indo-Burma Petroleum Company. The latter Company holds shares to the face value of £33,000 in the Hessford Development Syndicate, while of the remaining shares 66,402 are held by Messrs. Steel Brothers, who are also the managing agents for the Indo-Burma Petroleum Company. It is alleged that owing to the price war the price paid by the Indo-Burma Petroleum Company for crude has fallen by about Rs. 2 per barrel. On present production the loss which results is between Rs. 60,000 and Rs. 70,000 per annum. The Company states that its capital is insufficient to continue operations on a suitable scale and it appears that its object in supporting the application for protection is to raise fresh capital by the assurance that the former price per barrel will be restored. As a prospecting Company its future must depend not on the present prices obtained for its small production but on the estimate of its potentialities in the future when the present phase of world overproduction has passed. It appears to us that if the prospects of the Company are so hopeful as is claimed, there should be little difficulty in securing the capital necessary to develop it either under the present management or through some other agency.

63. Of the remaining Companies the Thilawa Refineries (Burma), Limited, is, as its name implies, solely a refining company. It produces no crude oil and at the moment owing to the insufficiency of the supply of crude oil has been suspended operations. The Indo Burma Oilfields, Ltd., is in the hands of a receiver on behalf of the debenture holders. It produces crude oil only and its production is very small amounting to about 1/300th of the total Indian production. That of the Irrawaddy Petroleum Syndicate and the Moola Oil Company, Limited, is even smaller. These Companies have been recently reorganized and are at present endeavouring to locate petroleum deposits. Should these Companies discontinue operations, no serious results are to be apprehended. Development work with the object of proving oil deposits in these and other areas will no doubt continue though perhaps through an agency other than that of these Companies.

64. Our estimates assume throughout that the relative proportions of oil products have remained unchanged. We desire to point out, however, that even under ordinary refining methods it is possible to vary the relative proportions of the products within about 10 per cent. Thus in the case of the Burmah Oil Company a considerable proportion of their surplus inferior kerosene has not yet been reached. Finally, by means of the cracking process, a still further variation in the proportion of the products can be obtained, particularly in the direction of increasing the proportion of superior kerosene and petrol. In connection with

the production of lubricating oil the Vacuum Oil Company have brought to our notice certain circulars issued to dealers by the Burmah Oil Company. The tone of these circulars is decidedly peremptory, and it is clear that the Burmah Oil Company is taking advantage of the fact that only indigenous petrol is sold in India, to compel dealers to extend the sale of Shell and the Burmah Oil Company lubrication oils under threat of cutting off supplies of petrol. This taken with the fact that the Companies generally are increasing their production of lubricating oil, suggests that relief from the present situation may, to some extent, be found by an increase in the sale of products other than kerosene.

65. Although the price war is confined to kerosene at present and the reduction in profits arising from the campaign of rate cutting initiated by the Royal Dutch Shell Group, must properly be calculated on the kerosene sales, we have thought it necessary in order to obtain a more complete idea of the financial position of the different companies, to include the sale of all products in our estimate. Our second term of reference directs us to consider to what extent the dumping of kerosene is contrary to the national interest. Perhaps the most important aspect of this question is the extent to which the present price war in kerosene will result in the closing down of existing sources of oil supply or the diminution of oil production in the future by the restriction of development and prospecting work. In order to arrive at any definite conclusion on this matter, it is necessary to ascertain the actual financial position of the Companies, the prospects of the oil production being reduced by the insolvency of one or more of them and the restriction of expenditure on development which their financial position may necessitate. These are questions which cannot be determined without an examination of the effect of the fall in price of all petroleum products and not merely of kerosene. For the difficulties in which the Companies now find themselves have been brought about not only by the artificial fall in kerosene prices resulting from the war but also by the general fall in the world price of all petroleum products which has resulted from overproduction in America during the last two years. Further since the proportion of petroleum products can, within certain limits, be altered without any considerable change in refining methods, a point which is very relevant to the enquiry is the extent to which losses resulting from the kerosene price war have been made good by increased sale of other products and the effect of any such variation in output on the ability of the Companies to continue development work must be taken into account. Finally, in estimating the probability of any improvement in the financial position of the Companies in the near future, the tendency in India towards improvement in the price of all petroleum products other than kerosene can not be overlooked. That a very considerable proportion of their reduction in profits is due to the fall in prices of products other than kerosene

is indicated by the following Table of nett returns to the Indo-Burma Petroleum Company at different periods:—

	Average per gallon, 1926.	Price per gallon October, 1927.	Price per gallon March, 1928.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Wax	1 0 5'96	0 12 11'01	0 14 11'88
Petrol	0 8 5'54	0 4 9'37	0 5 1'96
Turpantale	0 10 5'83	0 8 7'98	0 9 8'55
Lubricating oil . .	1 3 7'22	0 10 5'66	0 14 3'12
Jute batching oil . .	0 8 0'78	0 7 9'86	0 7 8'37
Diesel fuel . .	0 5 3'94	0 7 1'48	0 6 9'11

Production has of course varied in this period, but a general idea of the decline in profits may be obtained from the production figures for 1926 shown in the Table given in paragraph 41. This reduction in prices has been brought about by world conditions, in particular by flush production in America, a development which in the ordinary course oil companies must be prepared to face.

66. It is here necessary to explain that in drilling for oil, generally but not invariably in new fields, it sometimes happens that the drill strikes upon a supply confined under great pressure. In such a case the oil shoots out in dense column, sometimes two or three hundred feet in height. Such a well is described as a gusher and it is not uncommon for the crude petroleum output in such a case to exceed the storage capacity of the undertaking. When the output of crude is very large, a reduction in price is often the only alternative to allowing the oil to run to waste. In recent years in California, Oklahoma and West Texas, the output of crude has been very great. Prices have in consequence fallen rapidly. Thus while in 1926 the lowest price of American mid-Continent crude which corresponds most closely to Burma crude was 1'63 dollars a barrel, in 1927, it fell to '99 dollars a barrel. With this fall in the price of crude there has been a corresponding fall in the price of most oil products. By about October, 1927, prices in India had reached their lowest level and it will be seen from the Table given above, that since that month Indian prices, which are dependent on world prices, have shown some increase. The price of American mid-Continent crude which about the middle of 1927 stood at '99 dollars now stands at 1'22 dollars a barrel. We understand that restriction on crude production has now been

imposed* in California and Oklahoma and that restriction may shortly be expected in the Winkler County fields of West Texas. It appears probable, therefore, that a gradual increase in the price of petroleum products may be expected and though the effect of world prices may not manifest itself in the Indian price of kerosene the level of which will continue to be determined by the price war, the returns of the Indian Companies from the sale of their other products may be expected to increase. It is probable therefore that in the future their financial position will be distinctly stronger than that which we have estimated on the basis of present conditions except in the event of a price war in petrol, a contingency which we will discuss later.

67. The production of oil is such an exceedingly speculative undertaking that no attempt can be made to forecast the future course of events with any degree of accuracy. Production of crude oil. The life of a well, which depends largely on gas pressure, may be affected by entirely unforeseen circumstances such as the infiltration of water or the operations in a neighbouring well. As regards the immediate future, we have already indicated the probability of an increase in the Attock fields, while, provided development work is continued as we anticipate, production in the Assam fields may also be expected to rise. Since the control of the Assam Oil Company was taken over by the Burmah Oil Company in 1921, there has been a steady increase in output, the figure for crude oil rising from 5 million gallons in 1922 to 21 million gallons in 1926 and in 1927 to 22·7 million gallons. On the other hand, the Indo Burma Petroleum Company's wells have shown a steady decline in the past three years, falling from 19 million gallons of crude in 1924 to 16 millions in 1926 and to 13·6 millions in 1927. A considerable proportion of the recent reduction in profits of this Company is attributable to this cause. Much is expected, however, from the new area made available by the Ianywa reclamation scheme. Drilling has commenced in the bed of the Irrawaddy reclaimed by this project, and by the time this report reaches the Government of India, definite results will probably be known. The position of the British Burmah Petroleum Company is much the same as that of the Indo Burma Petroleum Company. Production was fairly constant at about 30 million gallons from 1922 to 1925, but in 1925-26 it declined to 27 million gallons and in 1926-27 to 23 million gallons. The output of the Yenangyaung field is now recognised to be definitely on the decline and this Company in common with other Companies operating in that area, cannot expect to maintain its production. The prospects in the Singu field are more promising and we observe from the last report of the Directors of the Company that a productive well has recently been brought in which indicates the extension of the drilling area to a point further south than had been anticipated. "The Directors are encouraged to hope that the falling off in the produc-

* The Commercial Supplement of April 26th, 1928, published by the Manchester Guardian.

tion in crude oil which has taken place during the past few years will be arrested". Although as we have seen all expenditure has been restricted so far as possible drilling in this area still continues.

68. Our survey of the financial position of the more important Companies has led us to the conclusion that if the present price

Development work unlikely to be seriously restricted. war does not continue for an extended period, all Companies can continue their prospecting and development work on the scale of the last two years without serious

financial consequences. It is not impossible, however, that the present price war will continue for some time and that the Royal Dutch Shell Group assisted by the Anglo-Persian Oil Company and the Indian Companies will endeavour to stabilize prices at such a level as to deprive the Standard Oil Company of any advantage which it might derive by the purchase and export to India of Russian rather than American oil. This is our reading of the situation and it is confirmed by the opinion of the representatives of both the Burmah Oil Company and the Asiatic Petroleum Company who appeared before us. Unless agreement is reached between the various contending Companies or unforeseen circumstances occur, the prices of kerosene may be expected to remain at or slightly above their present level. If the price war continues for an extended period we consider that the Burmah Oil Company with its dependent Company, the Assam Oil Company, the Indo-Burma Petroleum Company and the Attock Oil Company will be able to continue their development policy unchanged, until such time as the present phase of world overproduction of oil changes, when the increased prices for oil products (other than kerosene) should again consolidate their financial position. The British Burmah Petroleum Company's experimental drilling and prospecting may for a time be somewhat restricted, though it should be able to continue operation on a moderate scale in the areas such as Singu where the prospects of success are less problematical than in the other areas leased by this Company. But we are confident that on the whole development work will not be so restricted as seriously to affect the future oil production of India and that it will be unnecessary to close in prematurely existing wells and thereby risk the loss of a proportion of existing supplies.

69. Throughout this report we have considered the financial position of the Companies on the assumption that development

Restriction of development in interest of shareholders.

work will be continued on the scale of the past few years. Though it has been found that notwithstanding the price war, larger Companies with the possible exception of the

British Burmah Petroleum Company, will be able to continue operations on this scale, we do not wish it to be understood that there will be no curtailment of activity in this direction. The problem before the Boards of Directors is to reconcile the future welfare of the Companies with the natural desire of the shareholders for dividends. Even if Government assistance were now granted, it would appear probable that some reduction of expen-

diture in this direction would be ordered. We have already referred to the highly speculative nature of the petroleum industry. As the applicant Companies remark, it is an industry "susceptible to sudden changes from over to under production as compared with the world's demands". It is not to be expected, therefore, that during periods of depression dividends would be paid save perhaps by the old established Companies which have consolidated their position by the accumulation of very large reserves. It is improbable that the Directors who are farsighted men of great experience, will take any steps which might prejudice the future prosperity of these Companies. To this extent the national interests will be guarded and in the present financial position of the Companies it appears unlikely that any programme of curtailment of drilling or prospecting will be such as to affect seriously the future production of oil.

70. There is another aspect of the case also. There is little doubt that in the past the fullest use has not been made of the oil resources of the country. Natural gas has often been allowed to escape and many millions of cubic feet have thus been wasted.

Price war an incentive to conservation of natural resources.

Thus at the Indo-Burma Petroleum Company's gas well at Pyaye for eight months an average of 30 million cubic feet of gas were lost every day equivalent in thermic value to about 5,000 barrels of oil a day. This gas well has now been closed in under the orders of Government. Even now the only two Companies which own stripping plant for the removal of petrol from natural gas are the Burmah Oil Company and the Indo-Burma Petroleum Company. The latter Company has a modern absorption plant which recovers 2.2 gallons petrol per 1,000 c. ft. of gas. But the Burmah Oil Company's compressor plant is antiquated and gives a return of only 1.3 gallons per 1,000 c. ft. of gas. Other Companies in utilizing their gas as a source of power make no effort to recover petrol other than that which condenses in the pipes and the loss thereby resulting must be considerable. Then again, the British Burmah Petroleum Company is the only Company which has as yet attempted on a commercial scale to obtain further output of kerosene and petrol by cracking the residue of the crude after it has been subjected to the ordinary refining processes. The cracking process is in common use in America, and it appears that the security of the home market particularly for inferior kerosene, has deprived the Indian industry of some incentive to progress in this direction. Immunity from competition is not conducive to efficiency and we believe that one of the immediate consequences of this price war will be to stimulate the Indian Companies not only to undertake measures of economy but also to adapt their plant and processes so as to return a higher proportion of more valuable products. To the extent, therefore, that the price war secures the conservation of the country's resources of mineral oil, any attempt by Government to secure to the Companies a higher level of price might not unreasonably be considered contrary to the national interest.

71. Even if it were proved to our satisfaction that one or more of the smaller Companies whose financial position we have considered in detail, would be unable to continue operations indefinitely if the price war continued, a claim to protection would not be thereby established. The production of crude by all Companies other than Assam which is practically a part of the Burmah

Possible disappearance of smaller Companies, even if established, not necessarily ground for protection.

Oil Company constitutes less than 20 per cent. of the total Indian production. On the 1927 figures the production of the British Burmah Petroleum Company is between 8 and 9 per cent., that of the Indo-Burma Petroleum Company about 5 per cent. and of the Attock Oil Company about 4 per cent. With the possible exception of the Attock Oil Company, the production of which may be of military importance, it might be not unreasonable to hold that the disappearance of companies with so small a production would not be prejudicial to the national interest or seriously affect the future production of oil in India. Since we believe that the financial position of the larger Oil Companies is sufficiently strong to enable them to continue a policy of reasonable development, it is unnecessary to consider further this aspect of the case. But it is perhaps admissible to suggest that the fusion of some of the smaller Companies with the larger ones might prove on general grounds to be not entirely contrary to the interests of the country as a whole. We have already referred to the evils of competitive drilling and the Burma oilfields afford many examples of the practice. Thus, the boundaries of the Hessford Development Syndicate's area and of the British Burmah Petroleum Company's area at Singu are studded with wells of the Burmah Oil Company tapping the same area. We are aware that the local Government's regulations regarding the spacing of wells do much to remove the possibility of competitive drilling so far as new leases are concerned. But it appears to us that a more unified control such as would result by the absorption of the smaller Companies, would result in a more methodical and scientific system of drilling with fuller recovery of petrol and better utilization of gas as a source of power. It may be urged that a policy of amalgamation of the smaller with the larger Companies might result in the establishment of a monopoly with a possible rise in price to the consumer. But the Kerosene Pool in the past has always determined the level of prices in the country and its rates have been followed by the smaller independent Companies and even by the Standard Oil Company. It is not to be supposed, therefore, that the disappearance of the smaller Companies would injuriously affect the interests of the consumers.

72. Clearly any method of Government assistance to the Oil Industry which resulted in an increased price of kerosene would be contrary to the interest of the consumer. Interest of the consumer. and petroleum products are articles of such universal consumption that the consumer's interest constitutes to a very considerable extent the country's interest also. At the same

time it must not be forgotten that an immediate reduction in the price of a commodity is not necessarily to the ultimate advantage of the consumer. If the reduction in the price of kerosene is such as seriously to affect the home production and endanger the control of the indigenous industry over the Indian market, the consumer may in the end stand to lose rather than gain. An example of the extent to which a country may suffer at the hands of foreign producers, if prices are not controlled as in India by the policy of a strong indigenous industry is afforded by the oil market at Singapore, situated at no great distance from the oilfields of the Dutch East Indies. Present prices there vary from about Rs. 7-7-0 to Rs. 6-13-0 per bulk unit of 8 gallons ex-installation according to the quality of the oil, as against the prices of Rs. 5-12-0 for superior and Rs. 4-6-0 for inferior in force in India before the price war. We are not to be understood as necessarily supporting world parity as a fair basis for Indian prices. But it is inevitable that if over 30 per cent. of India's demand for kerosene is to be met by imports, the import price must fix the general price. There is, however, little probability of the Indian Companies losing their control of the Indian market as a result of the reduction in the price of kerosene. The Indian production of kerosene (156 million gallons) in 1927 constituted between 60 and 70 per cent. of the Indian consumption. Of this the Burmah Oil Company, whose financial stability is not threatened by the price war, contributed about three-quarters, while we are satisfied that the present reduction in prices will not affect the production of the remaining Companies to any considerable extent.

73. In their application to the Government of India dated the 15th December, 1927, the Oil Companies state that "the maximum price kerosene policy has been possible and is possible only so long as the indigenous production and all other indigenous products secure prices based on world market conditions". It might be inferred from this that in the event of the continuance of the war, the poorer class of consumer would lose the advantage of the low price for inferior kerosene. In point of fact the maximum price policy has been in abeyance since the initiation of the price war when the Kerosene Pool arrangements terminated. Actually, however, the differential of Rs. 1-6-0 between the price of superior and inferior kerosene has been maintained hitherto. It is true that recently the differential has been reduced to 14 annas by a reduction and increase in the respective prices of superior and inferior kerosene by 4 annas. But it has been stated by the representative of the Burmah Oil Company that the effect of this step will be very carefully watched before further steps are taken.

74. There are two reasons why it is important for the Indian Oil Companies to dispose of their total production of inferior kerosene. This quality of oil is unsuitable for use save in the primitive lamps used by the poorest class of Indian consumer. Its lighting qualities are poor and it burns with

a smoky flame. It is consequently not used and therefore not manufactured in other countries. Normally therefore the Indian Companies have no foreign competition to meet in this market and it is to their advantage to maintain such a differential between the price of inferior and superior kerosene as shall offer no inducement to manufacturers in other countries to adapt their refining methods to the production of this class of oil. If the Indian Companies were unable to dispose of the whole of their production of inferior kerosene, their position might be seriously affected. It is probable that a portion of the inferior kerosene, perhaps 10 per cent., could be converted into superior by the ordinary refining methods. But the bulk of it would either have to be cracked into petrol or superior kerosene—an expensive process—or sold as fuel oil. The price of the latter in India has been stated to be between 3 and 4 annas a gallon and normally therefore it is more profitable to produce inferior kerosene than to convert a portion into other products and sell the remainder as fuel oil.

75. It is therefore to the advantage of the Companies to maintain the demand for inferior kerosene in India. Any approximation of the price to that of superior kerosene tends to reduce the demand by the substitution of vegetable oils or diversion of consumption to superior kerosene. To some extent also the production of inferior kerosene gives the Companies a hold over their dealers, since there is no alternative source of supply, this class of oil not being manufactured outside India. Unless therefore an entirely new refining policy is adopted, it is improbable that any considerable further permanent reduction can be maintained in the differential between the prices of superior and inferior kerosene. So far as the consumer's interest is concerned, we are therefore of opinion that any assistance to the Oil Companies which would result in an increase in price would be contrary to the interest of the country.

76. We have yet to consider the revenue aspect of the question. The Oil Companies have stressed the importance as a source of revenue to Government of the indigenous production of kerosene. Assuming for the sake of argument that the price war did result in some decrease in the production of crude petroleum, it does not follow that Government's revenues as a whole suffer. The import duty on kerosene ($2\frac{1}{2}$ annas a gallon) is so much higher than the excise duty (1 anna) that from the strictly revenue point of view it would be advantageous to import all the country's requirements of kerosene. This will be clear from the figures given by the Indo-Burma Petroleum Company regarding payments by them to Government in 1927. The figures are as follows:—

	Rs.
Excise on kerosene	4,35,270
Royalty, income-tax and surface fees chargeable, taking kerosene at 50 per cent. total production	3,62,450
TOTAL	<u>7,97,720</u>

In 1927, 6,964,352 gallons of kerosene were produced. If this were imported, the import duty at $2\frac{1}{2}$ annas a gallon would amount to Rs. 10,88,180. Royalty and surface fees which are payable to the local Government amounted to Rs. 2.21 lakhs. Assuming then that the local Government was compensated for the loss of royalty and surface fees, the Central revenues would still benefit.

77. Our general conclusion then is that the present price war in kerosene, while of immediate benefit to the consumer, will neither adversely affect Government revenues, nor seriously prejudice the future production of oil in India. On the other hand, the economic pressure resulting therefrom is likely to reduce the costs of production and lead to better utilization and conservation of the mineral resources of the country. The absorption of one or more of the smaller Companies by the larger is not necessarily an evil since it would probably lead to a more methodical and scientific system of drilling with better recovery of petrol and better utilization of gas as a source of power. We are therefore of opinion that dumping in the sense used in our terms of reference is not contrary to the national interest.

78. We desire to add that in any case we consider the application for protection was premature. Although the time at our disposal has not been sufficient to explore the question of economy in production and manufacture, we have indicated certain directions in which the industry as a whole could undoubtedly reduce expenditure or increase its output of refined products with little additional cost. An examination of the economies introduced by the British Burmah Petroleum Company indicates that some of these could have been introduced with advantage even before the price war, had the necessary incentive to economy been forthcoming. Further, the full effect of changes in refining policy in the direction of increasing the output of products not affected by the price war has not yet become apparent and we believe the limit in this direction has not been reached. Finally it is recognised by the Companies in their joint letter to the Government of India, dated the 15th December, 1927, that the present cycle of overproduction will pass. They further state that "in the very nature of the industry as a whole—susceptible as it is to sudden changes from over to under production as compared with world demands—it is dangerous to take short views". With the passing of the cycle of overproduction, the price obtainable for all the products of the Companies unaffected by the price war will rise. Since none of the Companies stand in immediate danger, it is not unreasonable to expect them to await the anticipated rise in prices. Apart from this, until all possible economies have been effected and the processes of refining examined and if necessary adapted to changed price conditions, we could not consistently with our treatment of other industries, hold that in the national interest a case

had been made out for protection of the smaller companies against dumping on the ground that the future oil production of the country would be adversely affected. Since the Burmah Oil Company's claim for protection is contingent on our recommendations regarding the smaller companies, we consider it unnecessary to examine separately the case for protection of the Burmah Oil Company.

CHAPTER IV.

Third term of reference.

79. We now come to our third term of reference, namely to report whether it is likely that the price war will extend to petrol, what the consequences to the Indian producers are likely to be if it does and in that case what measures we would recommend.

Though at one time considerable quantities of petrol were exported from India, export has recently ceased, the indigenous production being barely sufficient to meet the home demand. We give below the recent increase in the demand for petrol in India:—

—	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
Production.	35,124,323	37,884,031	40,331,157	39,506,463	39,903,718	39,753,943	39,870,532	47,033,380
Import .	3,735	2,539	815	1,494	4,878	6,002	2,688	111,946
TOTAL .	35,128,058	37,886,570	40,332,172	39,507,956	39,908,596	39,759,945	39,873,220	47,145,326
Less Exports	21,240,678	19,516,393	19,760,576	18,923,865	22,262,585	12,679,032	2,220,780	3,844
Demand .	13,887,380	18,370,172	20,571,596	20,584,091	17,646,011	27,080,913	37,652,440	47,141,482

The increase in the last three years has been at the rate of about 10 million gallons a year. On the other hand, when in 1926, it was apparent that demand would soon overtake supply, an increase in production occurred which nearly equalled the increase in demand. But it is clear that if demand continues to advance at this rate, in a few years it will be difficult for the indigenous industry to meet the Indian demand. Mr. Gray the representative of the Burmah Oil Company, has given it as his opinion that in about two years demand will have overtaken supply and imports of petrol will become necessary. In giving this opinion he has taken into account the possibility of increasing the supply by improved methods of stripping petrol from natural gas and by conservation of such gas at the fields. On the other hand, it has been proved in America that the output of petrol can be much increased by the cracking process and indeed until recently without this process the supply of petrol would have long been insufficient for the world's demand. Any considerable augmentation of supply by this process in India must of course depend largely on the relative course of prices of the different petroleum products. On the whole, however, we consider that two years is a safe estimate of the period within which no considerable importation of petrol will be necessary.

80. The Standard Oil Company of New York has been watching with close attention the increase in the demand for petrol in India and has laid its plans for obtaining

Standard Oil Com- a share in the imports when imported petrol
pay's attitude. is required. The first step must clearly be
to erect installations at the main ports wherein to store the petrol

on arrival. Accordingly the Company has commenced to acquire land in Karachi, Bombay, Madras and Calcutta for this purpose. In Madras the land has been acquired. In the other ports applications for land have been made, but no sites have as yet been obtained. Taking into account the time necessary for acquiring sites and for erecting the installations it seems a reasonable estimate that the Company will not be in a position to market petrol on any considerable scale within two years. The matter is of great importance to our enquiry and it seems desirable therefore to reproduce *in extenso* the considered statement of the General Manager for India of the Standard Oil Company on this subject.

“With regard to the probable date our installations will be ready to permit of our entry into the Indian petrol market, I give it as a conservative estimate that it will take a full two years to complete the installations; some may be ready slightly under two years, but others may take more time to be completed. Any estimates that may have been made by members of my staff to the effect that we would be ready at any fixed date under two years, or at some time within a few months, are not authoritative and have been made without my knowledge or sanction. I am not prepared on behalf of my Company nor will I recommend to them that we give any undertaking whatsoever to restrict our sales of petrol in any respect to the exact difference between indigenous supply and the demand, as has been suggested. We expect that by the time we shall be ready to market petrol in India, the consumption of petrol will have materially increased to a point where we shall be in a position eventually to sell a quantity consistent with the plant investment that will be necessary. It was not our intention to give any other impression than this in our printed representation to the Tariff Board.”

“I will undertake on behalf of Standard Oil Company of New York to market such petrol as we do sell, at prices at which petrol is at that time sold by indigenous or other companies selling petrol in India. It is not our intention to enter the Indian market by cutting prices below those then prevailing and if petrol prices are at that time reduced, it will not be on my Company's initiative. That is the only guarantee I will give in connection with our entry into the petrol business in India.”

81. It is clear from this statement that it is not probable that the Standard Oil Company will import petrol within two years and we notice that in a recent circular to their agents the Burmah Oil Company has stated that “there is no prospect of the Standard Oil Company importing petrol

No import by Standard
Oil Company likely
within two years.

into India for a very long time to come". It might be possible to import petrol in small quantities or in barrels before two years have elapsed. Any such course appears to us unlikely. The indigenous Companies with their established connections would have little difficulty in making any such course of action extremely unprofitable for the Standard Oil Company and it is very doubtful whether by small and irregular importations any business connections of value would be established. It is reasonable to suppose therefore that the Standard Oil Company will wait until most of their installations are complete before engaging in this branch of the trade.

82. In their statement the Standard Oil Company give an undertaking not to initiate a price war in regard to petrol. It does

Conclusion as to probability of price war in petrol.

not follow that a price war will not occur in certain circumstances. Indeed the representative of the Burmah Oil Company has stated that if the Standard Oil Company of New York import petrol while the indigenous Companies are still able to supply the whole Indian demand, the Indian Companies will launch a price war. This contingency, however, need not seriously be considered, since the Standard Oil Company of New York have no intention of entering the Indian market on a considerable scale until the demand has probably outstripped the home production. As regards a price war resulting from the importation of Russian petrol the representative of the Burmah Shell Company has given his opinion that a period of two years should be sufficient to enable the Royal Dutch Shell Group and the Standard Oil Company of New York to compose their dispute. But in any case it appears to us that any attempt to forecast conditions in two years' time is quite impracticable. It is by no means improbable that within that period the rival companies will have come to terms. Moreover, the present depressed conditions in the world market for petroleum products may have passed away and the outlook for the oil companies improved in consequence. Nor is the time available for this enquiry sufficient to determine to what extent economies or changes in refining processes effected by the Companies will compensate them for any losses incurred. In so highly speculative an industry as the Oil Industry, not even an expert could forecast with any pretence to accuracy the production of crude petroleum of any given company. Further in the event of a price war in petrol it is impossible to foresee the extent to which petrol prices may be reduced. It may be assumed that the Royal Dutch Shell Group would reduce prices to an extent sufficient to eliminate any advantage the Standard Oil Company may derive from export from Russia. But the price at which the Standard Oil Company can obtain its supplies of petrol is unknown to us and in any case one of the contracts of the Standard Oil Company with the Soviet Government for kerosene will, we understand, by that time, have expired. Whether it will be renewed and if so, on what terms, it is impossible to say. Our conclusion, therefore, is that it is unlikely that the price war will

extend to petrol within two years. Whether at the end of that period a price war in petrol will be initiated must depend on the arrangements between the Companies. We consider it premature to express any opinion as to the probable results of such a war on the Indian producer at the end of that time and it appears to us that no immediate measures are called for.

83. In concluding this report, we desire to warn the public against accepting the estimates of the financial position of the Companies which we have put forward as

Estimates not to be taken as forecasts of balance sheets. representing actual financial results either of this year's working or of any future year. Since the balance sheets which form

the basis of our calculations were issued, many economies have doubtless been introduced while refining methods have already been partly adapted to changed market conditions. All markets in India are not equally affected by the war and changes in distribution may have important bearings on the fortunes of individual companies. Our object has in no sense been to attempt to forecast the next balance sheet of the companies but rather to set forth the maximum reduction in profits which, assuming other conditions previous to the price war continue unchanged in the main, may be expected to result from the present depressed price of all petroleum products.

CHAPTER V.

Summary.

84. We summarize our conclusions as follows:—

(1) We have taken the equivalent of world parity at Indian ports to mean not necessarily a fair selling price but the price of imported kerosene with reference to which the price of kerosene in India would be fixed *ex-main* installation in normal conditions.

(2) On this interpretation we consider that the price should be determined by the f.o.b. American Gulf price *plus* freight from Gulf ports to India and incidental charges such as profit, storage, duty, etc. Taking inferior and superior kerosene in the same proportion as the Indian production we estimate the equivalent of world parity at Indian ports at Rs. 4-8-4 per unit of 8 Imperial gallons in bulk.

(3) As a result of the war, prices have been affected in different degrees in different areas and the average price obtained by the Companies varies somewhat. Since the greater portion of the sales in India is made by the Burmah Shell Oil Storage and Distributing Company of India, Limited, we think that the average price obtained by it *ex-installation* for all areas in India other than the economic areas of the Assam and Attock Oil Companies, namely Rs. 3-10-9 per unit of 8 Imperial gallons in bulk, may fairly be taken as the current price of kerosene. This figure represents the price at which indigenous oil and imported oil are sold by the Burmah Shell Oil Storage and Distributing Company of India, Limited, in the Indian market.

(4) We find therefore that the sale of kerosene in India below world parity as a result of the price war is established.

(5) We find that the oil production in the main field in Burma, *viz.*, Yenangyaung, is now definitely on the decline, and though in the Singu and Indaw fields in Burma, and in the Assam and Attock fields, there is the prospect of enhanced production, it is clearly a matter of considerable importance to the future oil production of India, that the Companies should be in a position to continue prospecting and development work.

(6) On examining the financial position of the Companies we find that profits have been considerably reduced and we have considered whether the reduction in profits is such as to affect seriously the development and prospecting work undertaken by the Companies.

(7) We find that the reduction in profits resulting from the price war may lead to some restriction of development work in the case of one or two companies. But we are satisfied that no premature closing of oil wells will be necessary and that the

present production of oil is not likely to be affected to any serious extent.

(8) A very considerable part of the reduction of the profits is due to the fall in prices of products other than kerosene due to overproduction in America. As the American conditions improve, the effect will be reflected in prices in India.

(9) Since the proportion of the various petroleum products is not fixed but is variable within certain limits with little change in the cost of refining, it is probable that in this direction the Indian Companies may to some extent obtain relief from the effects of the price war.

(10) Although the present price war may continue for some time, it appears that the Royal Dutch Shell Group and the Indian Companies associated with it will endeavour to stabilize kerosene prices at or slightly above their present level. We think therefore that the most acute period in the price war is past.

(11) We believe that one of the immediate consequences of the price war will be to stimulate the Indian Companies not only to undertake measures of economy and to make the fullest use of their oil resources, but also to adapt their plant and processes so as to return a higher proportion of the more valuable products.

(12) We have considered the various national interests affected by the Industry and the effect of the price war on them and we are of opinion that no case has been made out for safeguarding the Indian Oil Industry against the sale of imported kerosene below world parity.

(13) We consider, however, that the recent reductions in railway freight on petrol and other oil products will seriously affect the Attock Oil Company's position in competing with foreign oil, since these reductions do not apply to the transport of oil within the economic area served by the Attock Oil Company. We recommend that this matter should be carefully considered by Government.

(14) We find that it is improbable that foreign petrol will be imported into India on any considerable scale within two years. It is impossible to foresee what the market arrangement between the various companies will be at the end of this period or to determine whether the price war will then extend to petrol. In any case we consider that no immediate measures are called for.

A. E. MATHIAS,
Member.

J. MATTHAI.
Member.

R. L. WALKER,
Secretary.

The 16th June 1928.

Note by the President.

Though I agree with my colleagues that no case has been made out to justify the Board's recommending any immediate action on the part of Government, I am at variance with them both as regards the scope and the method of our enquiry and I find myself unable to sign their report.

1. That report is based on a strictly literal interpretation of the terms of reference. They have been taken out of their context and treated as though they stood by themselves with the result that in my opinion there has been no substantial compliance either with the procedure indicated by the Government of India in paragraph 3 of their Resolution or with the requirements of the terms of reference read as a whole.

2. The origin of the enquiry as explained in paragraph 1 of the Government of India's resolution was the receipt by the Government of India of representations from indigenous Companies asking for protection against the injury inflicted on it by a kerosene war between two foreign groups, *viz.*, the Standard Oil Company of New York and the Royal Dutch Shell Group. In paragraph 3, the Government of India have explained that the question to be investigated was the advisability of safeguarding the indigenous industry against injury inflicted by dumping, that is the sale of imported kerosene in India at prices below world parity. The Government of India desire to know, and before any rational answer can be given to the terms of reference, it is necessary for the Board to consider—

- (a) whether imported kerosene has been or is being dumped, that is to say sold in India below world parity,
- (b) whether any injury has thereby been or is being caused to the indigenous industry,
- (c) the extent of the injury, if any, in so far as it may be reflected in its probable effect on the financial position of Indian producers.

Points (b) and (c) do not appear to have been investigated except indirectly and point (a) very inadequately, and, in my opinion, also incorrectly.

3. In order to answer point (a) it is necessary to ascertain the world parity price as well as the price of imported foreign kerosene. A finding has been given on the question of world parity but without in my opinion sufficient qualification of the evidence tendered in support of important items constituting the world parity price. But there is no finding which can be regarded as adequate on the average price at which all imported kerosene was sold. Though the Standard Oil Company sells three quarters, if not more, of the imported kerosene, neither its sales nor its prices have been taken into account in determining the average price of imported kerosene. Indigenous kerosene is being sold by the Burmah Shell Oil Storage and Distributing Company of

India, Limited, along with a small percentage of imported kerosene. Both indigenous and foreign kerosene are sold by this group at the same price. By an arithmetical comparison of an estimate of this price with the world parity price it is said that dumping is established. As I shall point out in my report, this estimate of the current price is incorrect. I am unable to agree that dumping is established. The amount of imported kerosene sold by the Burmah Shell Oil Storage and Distributing Company of India, Limited, represents about 15 per cent. of their total sales, and the fact that this small volume has been sold below world parity prices cannot be considered as adequate proof of dumping. As 'dumping' is defined in the terms of reference, it can be reasonably established, in my opinion, only if it is proved that imported kerosene taken as a whole is sold at a price which is below world parity. But as I have stated, no attempt has been made by my colleagues to determine this price.

4. Even if it were held that 'dumping' had been established on such evidence as my colleagues have considered adequate it was still necessary before proceeding any further to determine whether any injury had been inflicted on the Indian producers as a consequence of such dumping, and the extent of such injury. But the direct investigation of this aspect of the question, if it is kept in view, becomes after this stage a secondary object and an entirely new line of investigation is adopted and is described as follows:—(paragraph 39.)

“ Our object is to ascertain the financial position of the Oil Companies at present and in the future. The basis of enquiry is the last available balance sheet and profit and loss account of the Company. By applying the difference between present prices for all petroleum products manufactured by the Company and those current in the year under consideration to the production of that year, a general idea is obtained of the reduction in profits which has taken place. This method assumes that the whole production is sold in the year and that stocks of products remain constant. In the case of some Companies, stocks are valued at below market price. Any variation in stocks will therefore to some extent vary the profits. But we consider that such variation is not likely to affect seriously the validity of our conclusions. It also assumes—

- (1) that production remains constant and that the relative proportion of the different refined products remain unchanged;
- (2) that future prices remain on the present level;
- (3) that expenditure continues unchanged, no economies being possible ”.

5. As a result of the adoption of the above procedure an investigation into dumping and its effects upon each of the Indian

producer is converted into a general review of the whole field of the industry's activities. The claim of the industry for protection on the specific ground of the dumping of kerosene has not been adequately investigated and there is no finding, as far as I can see, on the probable effect of the injury inflicted by dumping alone on the financial position of the Indian producers. The investigation appears to have been conducted as if no question of dumping had been raised expressly and it might have been possible to arrive at the same conclusions even without holding that dumping had been proved. In my opinion, therefore, the main body of the report does not furnish a sound foundation for a substantial answer to the terms of reference.

6. The method adopted, moreover, involves far too many hypotheses and assumptions to ensure even a reasonable degree of accuracy. By way of illustration I cite the following passage from paragraph 55 dealing with the Attock Oil Company to show the process of reasoning by which some of the results have been arrived at:—

“ In 1926 the profit in India was £48,361. Owing to the increase in production, the expenditure per unit produced has very much declined. After examining the costs accounts which have been produced, we are satisfied that had the expenditure in 1926 been at the same rate as in 1927, on the production of the former year expenditure would have decreased by about Rs. 11 lakhs excluding from account London expenses, interest charged and depreciation. On the 1927 scale of expenditure per unit, profits in 1926 would thus have been increased by about £83,000 giving a total profit of £131,000 ”.

Having obtained hypothetical figures in the way indicated above as regards profits or losses, various adjustments are made sometimes in accordance with actual facts and at other times on hypothetical grounds, and the financial results so derived form the basis of the main recommendation that no case has been made out for national assistance.

7. In the course of the discussion observations have been made on the suitability or otherwise of technical processes, the reorganization of the industry, possible economies and the like. I am unable to agree with many of them without a good deal more technical knowledge than I have been able to acquire in the space of seven or eight weeks. It appears to me that some of them at any rate may, if not found wholly inaccurate, on further examination require radical revision.

8. I would also dissociate myself from the manner in which the general financial position of the Companies has been examined and some of the opinions upon the financial results have been expressed. Dealing with an already highly speculative industry I would guard myself more carefully than this report

would allow, against the expression of views which might be misunderstood by the investing public or affect the financial credit of any applicant Company, especially when, as in this enquiry, the application of an industry for protection has been rejected.

P. P. GINWALA,

President.

The 23rd June 1928.

Minority Report.

MINORITY REPORT.

CHAPTER I.

Questions to be investigated—Difficulties explained.

The Government of India in paragraph 3 of their Resolution
Question to be investi- No. 141-T (39), dated the 26th March, 1928,
gated. state—

“ The question to be investigated in the enquiry is the advisability of taking steps to safeguard an Indian industry from injury inflicted by dumping, that is the sale of imported kerosene in India at prices below world parity. In these circumstances the Government of India consider that no detailed examination of the costs of production will be necessary, and that it will suffice to ascertain by more summary methods the probable effect of the price war on the financial position of the Indian producers.”

In this paragraph the Government of India briefly explain the general question to be investigated and also indicate the lines on which the enquiry is to be conducted. The enquiry is to be a summary one, in which no detailed examination of costs is necessary. The enquiry is also to be limited to kerosene and not to extend to other petroleum products. For the purpose of enabling the Government of India to consider the advisability of safeguarding the indigenous industry against the injury inflicted by dumping, that is the sale of imported kerosene below world parity, the Board has been asked to ascertain (a) whether dumping has taken place, (b) if dumping is proved, whether the indigenous industry has been injured thereby and (c) if so, whether it is in the national interest that protection should be given against dumping. In determining the last point the Board is required to estimate the probable extent of the injury to the financial position of the Indian producers with reference to kerosene only.

2. The specific points upon which under the terms of reference
Issues involved in the the Board has to report may be thus stated—
investigation.

- (1) What price for kerosene should be taken to be equivalent to world parity at Indian ports?
- (2) Are current prices in India below that level?
- (3) If the answer to (2) is in the affirmative, what is their effect on the financial position of the Indian producers?

- (4) Is it in the national interest in view of their effect on the financial position of the Indian producers, to grant protection against the dumping of foreign kerosene and, if so, in what form and for what period?
- (5) Is the price war likely to extend to petrol?
- (6) If the answer to (5) is in the affirmative what will be the consequences to the Indian producers?
- (7) In view of such consequences what measures should be recommended?

3. Before discussing in detail the specific points involved in the terms of reference I should like to deal with certain general aspects of the kerosene rate war as a result of which the present enquiry was instituted. The public has been given to understand and a determined attempt has been made to persuade the Government of India that the immediate cause of the kerosene rate war was the indignation of the Royal Dutch Shell Group at the immoral conduct of the Standard Oil Company of New York in concluding a contract for the purchase at uneconomic prices of 'stolen' oil for sale in India, and in so placing its marketing organisation at the disposal of Soviet Russia. No evidence of any kind has been placed before the Board to support the allegation that the Standard Oil Company's purchase of Russian oil was at uneconomic prices but even if that allegation had been proved, there was no reasonable ground for complaint so long as the Standard Oil Company made no attempt to use that oil to enlarge its share of the Indian market by selling it in India below world parity prices. I do not propose to enter into any discussion of the moral aspect of this controversy: the Board has had no opportunity of hearing the other side of the case and is not therefore in a position to discuss the question. The real causes of the war, however, were very different from those alleged. By virtue of its possession of convenient sources of supply for the Indian market and of its understanding with the principal indigenous companies the Royal Dutch Shell Group had secured a dominant position in this country and had been able to maintain in co-operation with the indigenous producers a higher level of prices than would otherwise have been possible. The acquisition by its rival, the Standard Oil Company, of a new source of supply so much nearer the Indian market constituted a distinct menace to the Royal Dutch Shell Group's position. A further consideration was that it was becoming increasingly difficult to deny the 'geographical' claim of the Anglo Persian Oil Company to a share in the Indian market. The production of that Company has been increasing rapidly during recent years and in search of new markets for its increased production it was pressing its claim to a share in the Indian trade. The admission of this claim entailed the surrender by the Royal Dutch Shell Group of part of its own share unless the entry of the Anglo Persian Oil Company into the Indian market could be made at the expense of the Standard Oil Company. The Burmah Oil Company has a large interest in the

Anglo Persian Oil Company, and the hearty co-operation of the former Company with the Royal Dutch Shell Group in the rate war—a co-operation without which the war would in all probability never have been started—was natural enough. If the Burmah Oil Company ever felt any hesitation in entering the war, it was overcome by the promise of the Royal Dutch Shell Group through its subsidiary, the Asiatic Petroleum Company, substantially to indemnify both the Burmah Oil Company and the other Companies associated with it against losses arising out of the rate war.

4. In view of the events which preceded the launching of the rate war in September, 1927, and of the understanding existing

Failure to disclose material facts. between the main participants it is difficult not to find the principals of the applicant

Companies—I except the Indo-Burma Petroleum Company to whom the Asiatic Petroleum Company's promise of compensation does not refer—guilty of a lack of candour amounting almost to deliberate *mala fides*. The Government of India was not informed and it was not until the 1st May after the Board had been taking evidence for several days that it was admitted that the rate war had been started by the Asiatic Petroleum Company with the knowledge and consent of the Burmah Oil Company and the Board was informed that the Asiatic Petroleum Company had agreed to compensate the members of the Pool for losses incurred as a result of the rate war. In the joint representation dated 15th December, 1927, to the Government of India and in the later representations made to this Board it was stated that the rate war was a war "between two foreign interests over an issue with which we have no concern". I quote paragraph 2 of the representation of the British Burmah Petroleum Company's letter No. B.433 of 9th April, 1928, as typical of the attitude adopted at that time by the indigenous Companies.

"We desire in the first place to emphasize the fact that we have no concern with the causes which have led up to the dispute between the Standard Oil Company of New York and the Royal Dutch Shell Group, nor had we any part in the initiation of the kerosene rate war in which it culminated in September last, and which is still being carried on. We are, however, unwillingly involved in its disastrous results, which at the least are likely to lead in our case to very serious financial embarrassment in the near future unless some measure of relief and/or protection is afforded."

In his oral examination on the 26th April Mr. Gray stated that he was unaware whether the Burmah Oil Company or any other Company had ever approached the Asiatic Petroleum Company with a request that the latter should share the burden imposed by the rate war on the indigenous Companies, and he undertook to enquire of his principals in London. As a result the Board was informed on the 1st May that the Asiatic Petroleum Company had agreed to compensate members of the Kerosene Pool. It appears therefore

that the local representatives of the applicant Companies had no knowledge of this agreement, and the blame for the failure to place all the material facts of the case before the Government of India must rest upon their principals in London. To my mind their conduct as disclosed by these facts is indefensible. The machinery of this Board is intended to be used upon the instructions of the Government of India for the purpose of enquiring into *bonâ fide* applications by indigenous industries for protection against foreign competition. But it is difficult to regard the present as a *bonâ fide* application except perhaps in the case of the Indo-Burma Petroleum Company. The assistance of the Government of India has been invoked for a purpose which cannot be regarded as legitimate. Though compensation had been promised by the principal belligerent, an application for protection was put in as if the whole of the indigenous industry was suffering serious damage through the rate war. This failure to disclose material facts might alone have justified a summary dismissal of the application in the interest of public discipline.

5. In the present enquiry largely owing to the shortness of the time at the disposal of the Board and the consequent impossibility of making any critical examination of much of the evidence placed before it, the Board found itself faced with considerable difficulties. I am dissatisfied in particular with the evidence produced to prove the f.o.b. Gulf prices of kerosene, freight charges from the Gulf ports to India, and current selling prices, and in the remainder of the present chapter I propose to discuss these difficulties.

6. The expression 'world parity price' as used by the indigenous industry means the f.o.b. price of kerosene at the Mexican Gulf ports *plus* the charges incidental to importation, landing and storage and the revenue Customs duty. It is claimed that, as America accounts for more than 70 per cent. of the world's supply of crude oil, the world parity price of petroleum products is their price f.o.b. Gulf ports, and that its equivalent at Indian ports is this price *plus* the charges above mentioned. The world parity price or rather the 'American parity price', as I propose to call it, has therefore no relation to the cost of production or the fair selling price of petroleum products in India under competitive conditions. The Manager of the Standard Oil Company of New York admitted that the expression 'world parity' was new to him and that he was unable to explain what it meant, and it seems to me as though it has been used, if not invented, by the Oil Trusts to exact the highest price from the consumer. Be that as it may, the indigenous industry contends that the price calculated on the principles mentioned above is the equivalent of the world parity price at Indian ports, and represents the price at which it is entitled to sell indigenous kerosene. They contend further that if current prices fall below that level there is evidence of dumping and a claim for protection is justified.

7. The first item to be ascertained in the calculation of the equivalent of American parity is the f.o.b. Gulf price. The best evidence of the current price of any commodity is the price at which actual and *bonâ fide* transactions have taken place under competitive conditions.

Evidence of Gulf prices unsatisfactory.

We have no evidence of any such transactions to assist us in arriving at the Gulf prices. It is well known that business is often done, especially on a large scale and in a depressed market, at prices which are not only below quotations in newspapers but also below actual offers. The only evidence of Gulf prices available to the Board consists of quotations. Even as quotations they are of little assistance because the variations are so great that it is impossible to form any idea at what price business was actually done. I give below the prices supplied by the Indo-Burma Petroleum Company from the Petroleum Times and Reuter's Petroleum Service, those given by the Standard Oil Company and those upon which the Kerosene Pool based their calculations. In a cable dated the 24th April, 1928, from the Standard Oil Company of New York, New York, to the Standard Oil Company of New York, Rangoon, it is stated—

“There is no posted bulk price f.o.b. Gulf ports and Reuter's cables London of Gulf prices for prime white oil are merely indications of market conditions based on occasional report of sales made for export. Prices in Gulf are nominally half a cent per gallon lower than the New York posted export prices.”

It is clear from the above that the quotations cannot be taken as reliable proof of actual prices.

F.O.B. Gulf Port Prices.

Cents per American gallon.

	Petroleum. Times.	Reuters	Standard Oil Company.	Figure taken by Pool for calculation of world parity.
1923 January—June . . . . .	..	..	} 4½—6 {	6½
July—December . . . . .	..	..		5
1924 January—June . . . . .	..	..	} 5½—6 {	6
July—December . . . . .	..	..		6
1925 January—June . . . . .	..	..	} 4½—6½ {	6½
July—December— August 1	5-50	..		..
„ 29	5-25	..	} 4½—6½ {	..
September 5	5-25	..		6
„ 26	5-50	..	} 4½—6½ {	..
October 3	5-50	..		..
November 7	5-25	..	} 4½—6½ {	..
„ 28	5-75	..		..

F.O.B. Gulf Port Prices—concluded.

Cents per American gallon.

	Petroleum Times.	Reuters.	Standard Oil Company.	Figure taken by Pool for calculation of world parity.
1926 January—June—				
January 2	5.75	.	} 6½—8 {	6½
July—December . . . . .	..	..		9½
1927 January—June—				
June 11	5.75	..		8
July—December—				
July 2	5.75	..	} 4½ 7½ {	..
„ 21 . . . . .	..	5		..
August 6	5.75	..		..
September 3	5.75	..		..
„ 22 . . . . .	..	5.50		..
October 1	5.75	..		..
„ 22	6.75	..		..
November 5	6.75	..		..
„ 11 . . . . .	..	6		..
December 24	6.75	..		..
„ 31	6.75	..		..
1928 January 13 . . . . .	..	5.75	.	..
„ 20 . . . . .	..	5½	.	..
„ 27 . . . . .	..	5.50	..	..
March 30 . . . . .	..	5½	..	..
April 24 . . . . .	..	..	5.75	..

N.B.—New York export prices have been converted to f.o.b. Gulf port prices by the deduction of one half cent.

It will be observed from the above Table how large the variations are. At the request of the Board the Burmah Oil Company cabled their London office for a quotation and was given 6.5 cents as the f.o.b. Gulf price on 23rd April, 1928. This figure has been adopted in my colleagues' report. The Standard Oil Company's quotation, however, for the following day, 24th April, is 5.75 cents. In my opinion, therefore, little reliance can be placed on the evidence by which it is sought to prove the f.o.b. Gulf prices. Any results arrived at on the basis of these prices are liable to be misleading because they do not represent the real prices at which business was done. When it is considered that a variation of half a cent per American gallon means an increase or decrease in the equivalent of American parity of over two annas a unit—involving a relief or an additional burden to the Indian consumer of nearly half a crore of rupees on the consumption of one year—the danger of basing any conclusions upon such unsatisfactory evidence becomes apparent.

8. Freight constitutes almost as heavy an item as the f.o.b. Gulf price, in the calculation of the equivalent of the American parity price at Indian ports. Freight varies from time to time, and the evidence produced before the Board regarding these variations is little better than that supplied to prove the f.o.b. Gulf price.

Evidence of freight unsatisfactory.

In September, 1927, time charter freights are said to have been 8s. 6d. per ton, which is worked out as Rs. 1-3-0 per unit. But in calculating American parity for the period July to December, 1927, the Pool took freight at 12s. 6d. per ton, thus raising the cost per unit by 7 annas 6 pies to Rs. 1-10-6. As the importer's profit is calculated on the c.i.f. price, the charge under that head also was raised by one anna from 4 annas 6 pies to 5 annas 6 pies per unit. I am not in a position to challenge the rate of freight taken at the time the Pool made the calculations upon which they arrived at their figure for world parity for this period, but the point is that the item represents a hypothetical expenditure only and if, as appears to have happened in this case, the figure adopted was actually considerably above the freight rates in force during the period for which the Pool's calculations of world parity held good, the result is an additional burden on the Indian consumer amounting to about Rs. 1½ crores a year.

9. The current prices of indigenous kerosene which, until the rate war, were fixed by the Pool, are now fixed by the Burmah Shell Group. The Burmah Shell Group sells Current prices artificial. nearly 95 per cent. of the indigenous kerosene, the only company outside that group being the Indo Burma Petroleum Company. The Standard Oil Company of New York and the Indo Burma Petroleum Company follow these prices. It has been admitted that the initial and subsequent heavy cuts in prices were not due to any lowering of prices of imported kerosene by the Standard Oil Company but were made by the Asiatic Petroleum Company with the knowledge and co-operation of the other members of the Pool. Nor were they necessitated by any existing economic causes. It has further been admitted that on account of secret rebates and remissions to agents the nett receipts of the members of the Pool were actually below these reduced selling prices. Since March no new economic conditions have arisen to justify a reduction in the level of prices. If the American parity price of 6·5 cents which, it is claimed, was the price on the 23rd of April, is correct, there was good ground for raising the level of current prices. But from the 3rd of May the nominal price of superior kerosene was lowered from Rs. 4-8-0 to Rs. 4-4-0 while, at the same time, that of inferior was raised by 4 annas from Rs. 3-2-0 to Rs. 3-6-0 per unit by the Burmah Shell at the main Indian ports. The Standard Oil Company's prices have remained unchanged at about Rs. 4-11-6 in Bombay and at Rs. 4-15-6 per unit in the other ports. The object of the Burmah Shell is thus not to realise the best price that can be secured but to regulate prices to suit its purpose, which is to compel the Standard Oil Company to come to terms. One of these terms is the surrender by the Standard Oil Company of two-

thirds of its contract with the Soviet to the Royal Dutch Shell and the Anglo Persian Oil Company, to be divided equally between the two latter. Further while this enquiry is proceeding it is not unnatural for the indigenous industry to try to prove that prices realized are uneconomic and for that purpose to keep them at a lower level than is necessary. It will be seen, therefore, that in the present conditions there is no such thing as 'current' prices in the ordinary sense, for they are what the Burmah Shell make them for the time being. In the entirely artificial atmosphere thus created by the deliberate action of this group no correct valuation of current prices is possible. There is at present no economic relation between foreign and internal prices and the level of current prices cannot seriously be regarded as evidence of dumping. The principal importer of foreign oil, the Standard Oil Company, has never lowered its prices, except when it was forced to follow the cuts made by the indigenous industry jointly with the Asiatic Petroleum Company.

10. There is yet another fact which has an important bearing on the prices. The Standard Oil Company has never entered into competition against the indigenous industry in respect of what is described as inferior kerosene only.

Foreign competition in respect of inferior kerosene only. It is in fact the case of the indigenous industry that no such kerosene is produced in the United States. When imported from Borneo mainly by the Asiatic Petroleum Company for sale in India, the maximum difference between the contribution prices received by the Asiatic Petroleum Company for their superior and their inferior kerosene is four annas a unit. It is stated that in the Straits Settlements where there is a market for inferior kerosene it is sold by the Asiatic Petroleum Company at a price which is lower than that of superior by only 2d. per unit. But in India it has been the practice of the Pool until recently to maintain a differential of Rs. 1-6-0 a unit. The result is to lower the average realised price. The reason given for this policy is the good of the consumer of inferior kerosene. The real object, however, is to eliminate competition and consolidate the monopoly of the Pool in the sale of inferior kerosene. In these circumstances it is more than doubtful whether the price of inferior kerosene which has deliberately been kept lower than necessary is a factor which should be taken into account in determining the effect of the price war which is, in fact, confined to superior kerosene.

11. It is also by no means easy to determine the current prices with reference to any particular period. Not only have they been changed from time to time at the will of the Pool or the Burmah Shell, but they have varied from port to port. Between the two extremes, Bombay at the one end where the

Difficulty of ascertaining current prices of indigenous kerosene.

competition was keenest, and prices reached their lowest levels, and Rangoon at the other, where there was no competition and prices were almost entirely unaffected, there have been gradations of change to suit the conditions of local warfare. Then again, two kinds of kerosene are sold. The Standard Oil Company's prices for

superior oil which is the only kind sold by that Company were almost invariably two to four annas a unit higher than those of the Pool's. The inferior kerosene was sold at a price of Rs. 1-6-0 per unit below that of the superior until the 3rd of May when the difference was reduced to 14 annas per unit. As far as individual companies are concerned, the realised prices vary according to their contribution of low priced kerosene and the proportion which the total sales of inferior bear to those of superior kerosene. Some of the Companies, again, sell a larger proportion of their output of kerosene in Burma and Chittagong where pre-rate war prices, well above American parity, are still being substantially maintained. The only way, therefore, to determine the current prices of indigenous kerosene is to treat the weighted average prices realized by each Company as if they were the current prices for that Company.

CHAPTER II.

Dumping: not established.

12. In view of the difficulties referred to by me in the last Chapter, it seems almost idle to pursue these investigations any further, for the results obtained will be unreal and can serve no practical purpose. But serious issues have been raised in connection with an indigenous industry of first rate importance, and if this application is summarily dismissed there may be room for misunderstanding. Subject, therefore, to what I have said by way of reservation in Chapter I, I shall now proceed to investigate the issues set out in paragraph 2 on the lines laid down by the Government of India as explained by me in paragraph 1. I propose first of all to ascertain upon the figures supplied by the applicant Companies the equivalent at Indian ports of the American parity price (a) from the beginning of the price war until the beginning of this enquiry in April, and (b) after April, 1928. Having ascertained the American parity prices, I shall consider whether any dumping, that is the sale of imported kerosene below those prices, has been established. I shall then ascertain how far, if at all, the realized prices for indigenous kerosene during the earlier period were below American parity prices in order to estimate whether the financial position of the Indian Companies has been adversely affected by the rate war. In order to get a reasonably accurate idea of the effects of the rate war on the financial position of the Companies, it will not be enough merely to take the rate war period into account. If the Companies' receipts were in excess of those realizable at the equivalent of American parity prices, during, say, the six or nine months immediately preceding the rate war, they should have no reasonable ground for complaint if in a corresponding subsequent period they had to return to the consumer the excess received from him during the earlier period. This is in fact no more than the application of the Pool's own principle which it is claimed regulated the fixing of the prices each half year. For this purpose I shall take into account the American parity and the realized prices for the whole of the period beginning from January, 1927, and ending with March, 1928. I shall also make an estimate of the immediate future selling prices of the indigenous Companies and consider their effect on the financial position of the Companies. When I have completed this part of the examination, I shall discuss what I consider to be real equivalent at Indian ports of world parity price since the beginning of the rate war and at the present moment and consider whether any dumping has been proved on this basis. I shall then consider by comparison with the realized prices and the estimate for the future prices to what extent the financial position of the Companies has been or is likely to be affected.

13. I propose to limit the examination of the financial effect of the late war to those of the indigenous Companies which are actual applicants for protection. The Burmah Oil Company has asked for no protection, though it claims that it should be treated on the same footing as other Companies if any recommendations are made in their favour.

This Company, however, is now openly one of the allies of the two foreign groups engaged in the war, and would on that account be debarred from claiming any national assistance. It is therefore quite unnecessary to examine how its voluntary action has affected its financial position. The Assam Oil Company is practically owned by the Burmah Oil Company and I can, therefore, make no distinction between that Company and the Burmah Oil Company. The three producing and refinery Companies that remain are the British Burmah Petroleum Company, the Indo-Burma Petroleum Company and the Attock Oil Company. There are some Companies which are engaged solely in winning and producing crude oil. These have no case apart from the others and must stand or fall with them and I do not propose to deal with them separately.

14. The equivalent of American parity at Indian ports, as given by the Indian Companies from September, 1927, until March, 1928, is Rs. 4-9-9 per unit. This figure is calculated as follows:—

	Rs.	A.	P.
F.o.b. Gulf port price 5·75 cents	1	9	3
Freight	1	3	0
Leakage and insurance	0	0	6
10 per cent. profit on c.i.f.	0	4	6
Storage	0	3	0
Landing and installation	0	1	6
Import duty	1	4	0
	<hr/>		
	4	9	9

The profit of 10 per cent. on the c.i.f. price is excessive. This is the profit which, it is said, an imaginary importer of kerosene might claim as reasonable. The real importers, however, are the Standard Oil Company of New York and the Asiatic Petroleum Company who are for practical purposes also the sellers both in the country of origin and in India. No actual service other than the provision of the capital locked up during the period of transit is rendered by the importers and that is certainly not a service in consideration of which they can reasonably claim a profit of 10 per cent. Excluding for the moment the interest on the capital locked up in the imported oil, the levy of this charge on the total demand of the country, about 30 million units a year, has the effect of throwing an extra burden of more than Rs. 80 lakhs a year on the consumer. This charge is clearly excessive, and I would reduce it to $2\frac{1}{2}$ per cent. or from 4 annas 6 pies to 1 anna 1 pie per unit. The rate of $2\frac{1}{2}$ per cent. is ordinarily a liberal rate of commission for an importer, even if it

includes interest on the capital locked up. The duration of the outward voyage is said to be 69 days and that of the return voyage 57. Interest at $7\frac{1}{2}$ per cent. on the f.o.b. price of the oil for the duration of the outward journey will amount to 4 pies, leaving 9 pies which considering the nature of the service constitutes a very reasonable profit even if interest on freight has to be paid therefrom. The equivalent at Indian ports of American parity for superior kerosene from September, 1927, up to April, 1928, was thus Rs. 4-6-4 per unit. There is no inferior kerosene imported from America but the Pool paid for its supplies to the Asiatic Petroleum Company 4 annas per unit less for inferior than for superior kerosene, and this amount may be taken as representing the difference between the prices of the two kinds of kerosene. The price of inferior kerosene is, therefore, Rs. 4-2-4 per unit. The Pool's sales of superior and inferior kerosene were approximately in the proportion of one to two and, therefore, the equivalent of the average American parity price of kerosene at Indian ports ex main installation from September, 1927, to March, 1928, was Rs. 4-3-8 per unit.

15. So far as there is any evidence, it would appear that the equivalent of American parity at Indian ports from January, 1927, up to September, 1927, was the same as during the later period. The Pool's selling prices were also identical for the two periods and it would not, therefore, be unreasonable to assume that the American parity prices were the same.

16. I shall now calculate the equivalent of American parity at Indian ports since April, 1928. The f.o.b. Gulf ports price on the 24th of April, 1928, according to the Standard Oil Company's cable was 5-75 cents per American gallon. If I were to adopt this price as the correct one, the equivalent of American parity at Indian ports would remain the same as during the two earlier periods. The Indian Companies, however, claim, on a quotation of about the same date, that the f.o.b. Gulf ports price was 6-5 cents per gallon. If this figure is accepted, the equivalent of American parity at Indian ports from April, 1928, is Rs. 4-9-9 per unit as under—

	Rs.	A.	P.
F.o.b. Gulf price 6-5 cents	1	12	7
Freight	1	3	0
Leakage	0	0	6
$2\frac{1}{2}$ per cent. profit on c.i.f.	0	1	2
Storage	0	3	0
Landing and installation	0	1	6
Import duty	1	4	0
	<hr/>		
	4	9	9

The price of inferior kerosene will be Rs. 4-5-9 and the average of superior and inferior Rs. 4-7-1 per unit.

17. In order to ascertain whether dumping is taking place, it is necessary to investigate the prices at which imported kerosene is sold in the country. The Standard Oil Company of New York has been for the past many years the largest importer of foreign kerosene. In Appendix I are given its imports since 1913. They consist only of superior kerosene and account for about 75 per cent. of the total imports. The Asiatic Petroleum Company's imports account for the remaining 25 per cent. About two thirds of the Asiatic Petroleum Company's imports are inferior kerosene; their imports of superior kerosene represent therefore about 8 per cent. only of the total foreign imports. In these circumstances it may fairly be argued that the prices at which the Standard Oil Company sells its kerosene are the prices at which foreign kerosene is sold in the country. Appendix II shows the rates at which the Standard Oil Company has sold its kerosene since September, 1927. It will be observed that in the Calcutta area the prices have been well above American parity throughout the period. There were heavy cuts in parts of the Bombay, Madras and Karachi areas but the weighted average price realized ex main installation by the Standard Oil Company for all areas for the period 23rd September, 1927, and to 31st March, 1928, was Rs. 4-15-2 per unit. During this period the average price realized by the Asiatic Petroleum Company for their superior oil was about Rs. 3-13-6 a unit. The inclusion of this oil would lower the weighted average price of imported superior kerosene by two annas only to Rs. 4-13-3. During the same period the Asiatic Petroleum Company's inferior kerosene sold at about Rs. 2-13-6 and the inclusion of this oil along with the Standard Oil Company's and the Asiatic Petroleum Company's superior oil would further lower the price by 5 annas 2 pies, giving a weighted average ex main installation for all imported kerosene for the period September 23rd, 1927, to March 31st, 1928, of Rs. 4-8-1.

18. Whether, therefore, we take the Standard Oil Company's weighted average realized price of Rs. 4-15-2 or the weighted average of the Standard Oil Company's and the Asiatic Petroleum Company's combined imports of superior kerosene, viz., Rs. 4-13-3, or the average of all imported kerosene, viz., Rs. 4-8-1, the selling price of imported kerosene for the period 23rd September, 1927, to 31st March, 1928, never dropped below the corresponding American parity price, namely Rs. 4-6-4 for superior only and Rs. 4-3-8 for superior and inferior combined. Since March, 1928, there has been a gradual but steady rise in prices and the current weighted average selling prices would be higher than those of the earlier period of the war. Even those however are above the figures which I have calculated as the American parity prices subsequent to March, 1928, viz., Rs. 4-9-9 for superior only and Rs. 4-7-1 for the average of superior and inferior. It is clear, therefore, that neither during the earlier part of the rate war, 23rd September, 1927, to 31st March, 1928, nor subsequently has there been any dumping.

CHAPTER III.

Case investigated on American parity prices claimed by industry.

19. Though I hold that no dumping has been proved and our terms of reference do not therefore require us to examine whether the indigenous industry has been adversely affected by the rate war, it is of interest to see to what extent the financial position of the applicant companies has been affected by the reduced prices. This part of the investigation, however, is subject to the observations made by me in Chapter I. As I have explained in that Chapter, it is the deliberate policy of the Burmah Oil Company and its associate companies working in alliance with the Asiatic Petroleum Company to keep their selling prices below American parity. The realized prices are, therefore, unreal and there is no economic connection between them and the prices of imported kerosene. Any resulting injury to the indigenous industry is likewise self inflicted and one for which the sale of imported kerosene cannot be held responsible.

20. The following Table shows that during the first half of 1927, when the American parity price was at about the same level as in the later period, *viz.*, Rs. 4-3-8 per unit, the British Burmah Petroleum Company realized on an average 14 annas a unit and the Indo-Burma Petroleum Company 9 annas 10 pies per unit more than American parity. The amounts therefore realized *ex* main installation by these two companies in excess of the amounts realizable at the equivalent of American parity are shown below :—

Name of Company.	Units sold	Price realized.	American parity.	Difference per unit.	Excess.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.
British Burmah Petroleum Company.	1,073,982	5 1 10	4 3 8	0 14 2	9,50,366
Indo-Burma Petroleum Company.	581,567	4 13 6	4 3 8	0 9 10	3,57,431

Position of indigenous companies—July to December 1927.

21. During the second half of 1927 (July to December) which included three months of the rate war the results were as follows:—

Name of Company	Units sold.	Price realized.	American parity.	Difference per unit.	Excess.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.
British Burmah Petroleum Company.	921,140	5 3 10*	4 3 8	1 0 2	9,30,735
Indo-Burma Petroleum Company.	462,239	4 4 11	4 3 8	0 1 3	36,112

22. The nominal selling prices of the Burma Shell Group ex main installations at the main Indian ports for the period January to March, 1928, were Rs. 4-8-0 and Rs. 3-2-0 respectively for superior and inferior kerosene. In Burma they were in the neighbourhood of Rs. 5-8-0 for superior and Rs. 4-1-0 per unit for inferior. Owing to the payment of rebates and remissions and differences between localities, however, the actual weighted average realized prices were expected to be smaller, and at my request the Burmah Oil Company supplied me with the realizable prices for January and February for India and January to March for Burma, in their letter dated the 7th June, 1928. The weighted average price there stated is Rs. 3-4-7 per unit. On further enquiry I have found that in calculating this weighted average price they took into account the sales of the Asiatic Petroleum Company in India which have been on a much larger scale since the rate war especially of inferior kerosene. These amounted to approximately 34 per cent. of the Burma Shell's total sales in India. If these are excluded, the weighted average is about Rs. 3-7-4 per unit for the indigenous companies other than the Indo-Burma Petroleum Company and the Attock Oil Company. During this period the British Burmah Petroleum Company received ex refinery 5-08 annas per gallon including the excise duty. If the pre ex main installation charges of 14 annas 2 pies and landing and storage charges at the ports of 4 annas 6 pies per unit are added, the equivalent of an ex refinery price of 5-08 annas per gallon is Rs. 3-11-4 per unit ex main ocean installations. During the same period the realized average price of the Indo-Burma Petroleum Company was Rs. 3-13-5 per unit.

23. Taking the prices given in paragraph 22, the results for the period January to March, 1928, may be stated as follows:—

Name of Company.	Units sold.	Price realized.	American parity.	Difference per unit	Deficit.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.
British Burmah Petroleum Company.	464,377	3 11 4	4 3 8	0 8 4	2,41,862
Indo-Burma Petroleum Company.	215,467	3 13 5	4 3 8	0 6 3	84,167

* The Pool's contribution prices for supplies from the British Burmah Petroleum Company held good up to 31st December, 1927.

Financial position—
January 1927 to March,
1928.

24. The nett result for the whole of 1927 and the first quarter of 1928 may be summarized as follows:—

	BRITISH BURMAH PETROLEUM CO		INDO-BURMA PETROLEUM Co.	
	Above American parity.	Below American parity	Above American parity.	Below American parity.
	Rs.	Rs.	Rs.	Rs.
1927 January—June . .	9,50,366	.	3,57,431	.
July—December . .	9,30,735	...	36,112	...
1928 January—March . .	..	2,41,862		84,167
	18,81,101	2,41,862	3,93,543	84,167
Net result .	16,39,239	...	3,09,376	...

It will be seen from the above that the actual receipts of these two companies were considerably higher than those which they would have received if their kerosene had been sold at a figure corresponding to American parity. The British Burmah Petroleum Company realized over Rs. 16 lakhs and the Indo-Burma Petroleum Company just over Rs. 3 lakhs more than they would have received on the basis of American parity. The actual results, however, may be more favourable in the case of the British Burmah Petroleum Company owing to the agreement for compensation payable by the Asiatic Petroleum Company to the former members of the Pool. I am not prepared to make any estimate however of the amount of compensation thus payable. The Burmah Oil Company which also receives compensation estimates that it will get about 3*d.* per unit after April, 1928, while the Asiatic Petroleum Company thinks that owing to a decline in prices in China little or nothing may be payable. These conflicting statements permit of no useful estimate.

25. I have stated in paragraph 16 that the American parity price since April, 1928, is Rs. 4-7-1 per unit. As regards the selling prices, only a very approximate estimate is possible. The current price of Rs. 3-10-9 supplied by the Burmah Oil Company at the request of my colleagues and adopted by them as representing the price of all kerosene appears to me to be obviously wrong. As an indication of the general level of prices, it is misleading for it excludes all the sales of the Standard Oil Company, while it includes those of the Asiatic Petroleum Company. If the sales of Standard Oil Company, which accounts for nearly 25 per cent. of the total sales in India, are included, the average price of all kerosene will be raised to Rs. 4 a unit. As a measure of the prices realizable by the indigenous company it is equally misleading because of the inclusion of the Asiatic Petroleum Company sales which, as I have

Estimate of present selling prices.

explained in paragraph 22, lowered the weighted average in respect of January and February by about 2 annas 9 pies per unit. Further, the price of Rs. 3-10-9 per unit assumes that this was the realizable price of each individual Company. Such however is not the case because the realizable price of each Company will vary according to the proportion of its sales made at the higher rates still in force in Burma and the proportion which its sales of superior bear to those of inferior kerosene. It is clearly necessary, therefore, to make an estimate in some other way. Since May, 1928, the nominal prices of the indigenous companies ex main installations at the Indian ports has been Rs. 4-4-0 per unit of superior and Rs. 3-6-0 per unit of inferior kerosene, though owing to the rebates and remissions they may not be stabilized at these levels for some time to come. In Burma there has been no change in the level of prices. According to the estimate made for me by the Burmah Oil Company on the assumption that the ex main installation prices at the Indian ports are gradually stabilized at Rs. 4-4-0 and Rs. 3-6-0 respectively for superior and inferior kerosene, the weighted average price realizable after May, 1928, throughout India and Burma may be taken to be Rs. 3-13-3 per unit. This estimate includes the Asiatic Petroleum Company's sales and may require an adjustment. But I think it might be safer not to make any, because when the rate war stops entirely or prices are stabilized on a war footing, the imports of foreign oil by the Asiatic Petroleum Company may not be on as large a scale as now, and the weighted average therefore may not be appreciably higher than Rs. 3-13-3 per unit. I will accordingly adopt this as the realizable price of the British Burmah Petroleum Company, though in fact it may be an anna or so higher. The change of prices will not affect the prices realizable by the Indo-Burma Petroleum Company to any appreciable extent and the average price may be taken as before at Rs. 3-13-5 per unit.

26. On the assumption that the volume of kerosene sold per month remains substantially the same as that sold during the first three months of the current year, the amount by which the average monthly receipts from the sale of kerosene by these two companies will fall below the receipts which would be realized if the sales were at American parity is shown in the following Table:—

Name of Company.	Estimate of units sold per month.	Estimate of selling price.	World parity.	Difference per unit.	Deficit.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.
British Burmah Petroleum Company.	154,792	3 13 3	4 7 1	0 9 10	95,126
Indo-Burma Petroleum Company.	71,822	3 13 5	4 7 1	0 9 8	43,393

27. Our terms of reference specifically exclude us from any detailed examination of the costs of production and I am therefore unable to express any opinion as to how far below American parity it is possible for the price of indigenous kerosene to fall before it ceases to yield a fair return to the producer, but I certainly am not prepared to accept the hypothesis that any difference between American parity and the price actually realized by the indigenous companies represents a loss. The Table set out at the end of paragraph 26 shows that if prices remain more or less at their present level and the volume of sales does not vary substantially, the amount by which the receipts of the British Burmah Petroleum Company and Indo-Burma Petroleum Company will fall below those realizable on the basis of American parity will be Rs. 11,41,512 and Rs. 5,20,716 per annum respectively. The excess realized by the British Burmah Petroleum Company up to the end of March, 1928, was, as has been shown in paragraph 24, over Rs. 16 lakhs, and its finances will not therefore really be adversely affected for 18 months. The Indo-Burma Petroleum Company also realized during that period an excess of Rs. 3 lakhs and for the next six months or so its position will remain unchanged. If any compensation is received by the British Burmah Petroleum Company from the Asiatic Petroleum Company, the deficit in the case of the former Company will be reduced to the extent of the compensation received. An examination of the British Burmah Petroleum Company's balance sheets for 1926 and 1927 shows, moreover, that even if no compensation is received the diminution of its profits to this extent will have no serious effects on its continued existence. The position of the Indo-Burma Petroleum Company also is too powerful to be affected in any way by an annual diminution of its income by Rs. 5,20,716. Even in the last year's balance sheet, which contained the results of three months of the rate war, the Company showed a profit of Rs. 8,02,103 and a reduction of that amount by a maximum of Rs. 5¼ lakhs will have no prejudicial effect on the future of the Company. During the five years 1922 to 1926 this Company distributed in dividends to its shareholders over Rs. 1¼ crores. If, therefore, no dividend at all were received by the shareholders even for several years, I can see no reasonable ground in that fact alone for national assistance. The losses of both the Companies, moreover, can be substantially reduced by a readjustment of production. While the war lasts it is not necessary for them to sell more inferior kerosene than is absolutely necessary to retain their name in the market and production can be extended to other products which have not been affected by the rate war.

Financial position considered.

28. The case of the Attock Oil Company still remains to be considered. This Company's refinery is situated at Rawalpindi at a distance of some 800 miles from Karachi which is the nearest Indian port for the importation of foreign kerosene. It is therefore more favourably situated than the other Indian companies and has a large local market in which foreign competition is not ordinarily

Attock Oil Company's case.

experienced. The prices realized by this Company ex refinery have always been not only much higher than the average prices realized ex refinery by the other companies, but also considerably above the equivalent of American parity. Between the beginning of the rate war in September, 1927, and December, 1927, the weighted average realized price of the Attock Oil Company ex refinery was 8 annas 1.4 pies per gallon, or Rs. 4-0-11 per unit, and between January, and March, 1928, 7 annas 5.3 pies per gallon, or Rs. 3-11-6 per unit. If the other Indian companies had received these prices ex refinery, they would have amounted with (a) the cost of transport, 12 annas, and (b) landing and miscellaneous, 4 annas 6 pies, and (c) excise duty, 8 annas per unit, to Rs. 5-9-5 and Rs. 5-4-0 respectively. These prices are well above American parity. So far as this Company is concerned, therefore, no further investigation is necessary.

29. It is clear from the facts set out in this chapter that even if the equivalent of American parity is based on their own figures,

No adverse effect of price war justifying national assistance and no recommendations.

there is no occasion for any detailed examination of the accounts of any of the three Indian companies. The prices of foreign kerosene are, as has already been stated, above American parity. As has been shown

in paragraph 24, up till March, 1928, the price war has had no adverse effect on the financial position of the British Burmah Petroleum Company and the Indo-Burma Petroleum Company. The reduction since then in their revenues, due solely to the price war, will, as I have stated, have no serious consequences on the future of either. I have consequently no recommendations to make as regards kerosene, and no answer other than one in the negative can be given to the second term of reference.

CHAPTER IV.

Real equivalent of World Parity: no dumping: effect of Pool's policy on consumer.

30. In Chapters II and III, I have disposed of the reference as regards kerosene on the assumption that the equivalent of world parity price at Indian ports is the f.o.b. price at the Gulf ports *plus* the cost of importation and other incidental charges. I hold, however, that this principle cannot be accepted without admitting the perpetual right of the Oil Trusts to a world monopoly in which all competition is to be eliminated in their interests. In spite of whatever doctrine the Oil Trusts may invent, and enforce by reason of their powerful monopoly, it is impossible to get away from the position that with reference to any particular market, the equivalent of world parity must be the price at which under competitive conditions petroleum products could be landed in that market on a commercial scale. Before the rate war real competitive conditions did not exist in India and there was no one to challenge the Pool's claim to receive the equivalent of American parity for their petroleum products. These conditions have changed. Foreign kerosene has been imported from Russia by the Standard Oil Company on a scale sufficiently large to influence internal prices and there is no evidence that Russian oil cannot be imported in quantities sufficient to meet the whole of India's demand for foreign kerosene. Therefore it is the price at which Russian oil can be landed in India, so far as that can be ascertained, which is to-day the equivalent of world parity at Indian ports.

31. There are other reasons why the claim of the indigenous industry to American parity prices cannot be supported. Its admission would imply that in the interests of the Oil Trusts the nearer oil fields are not to be developed so long as their development results in lowering the prices secured or rather dictated by the Trusts. It would also mean that until it suits the policy of the Trusts, the Indian consumer is to derive no benefit either from the possession of mineral resources in his own country or from the existence of markets nearer or cheaper than America. A further reason why American parity cannot at present, or at any rate in the near future, reasonably be regarded as the dominant factor in determining world parity may be found in the fact that the production of crude in the Russian oilfields has recently been steadily on the increase. Russia at one time was the largest producer of oil in the world; the United States of America being the second. According to the estimates of production for 1927, Russia was the largest producer of crude after the United States. Production alone, however, cannot for ever be regarded as the decisive price factor. Russian oilfields are said to contain nearly 30 per cent. of the world's reserves against 12 per cent. of the United States. Whether these figures are correct or not, the outstanding fact remains that if Russian and other nearer oilfields are developed,

they must sooner or later necessitate a re-distribution of markets and a re-adjustment of world prices. That this has not taken place as rapidly as it should have done is in a large measure due to the activities of the Oil Trusts which up to now have succeeded in controlling production as well as prices and the Indian consumer is now being asked not only to refuse to avail himself of the nearest sources of supply, but actually to assist the Trusts in retaining a perpetual control over world production and in maintaining a higher level of prices than economic conditions given free play would justify.

32. I have stated in an earlier paragraph that the best evidence of current prices is the price at which business has been actually done. Such evidence exists as regards the imports by the Standard Oil Company from Russia, though perhaps it is not as good as it might have been. It is alleged by the applicant Companies in their original representation to the Government of India, as also in their subsequent oral evidence, that the price actually arranged between the Standard Oil Company and the Soviet was not more than 5 cents per gallon. The contract is said to be for 150,000 tons a year for three years. A further contract for 60,000 tons a year for a period of six years is also mentioned. The Standard Oil Company of New York has not denied any of these allegations. It was pointed out by me to the representative of the Company that if these allegations were not denied, I should have to accept them as true. In spite of this no attempt has been made to deny them. I must, therefore, presume that the price actually paid was not more than 5 cents per gallon. There is no evidence produced to show that there has been any rise in Soviet prices since then. It is thus the case of both sides that the price did not exceed 5 cents per American gallon. I would accordingly adopt this price of not more than 5 cents per gallon as the world parity price f.o.b. Batoum.

33. According to the figures supplied by the Standard Oil Company the freight from Batoum to Indian ports is $2\frac{1}{2}$ cents. per American gallon. Freight per unit will amount to 11 annas. The charge for leakage and insurance which amounts to 6 pies for the Gulf ports—Indian voyage may be halved. Profit also will be reduced in proportion to the reduction in the c.i.f. price. The other charges will remain the same. The landed duty paid price of Russian oil and the equivalent of world parity at Indian ports will therefore be Rs. 3-10-7 per unit, made up as follows:—

	Rs.	A.	P.
F.o.b. price (5 cents per American gallon)	1	6	0
Freight	0	11	0
Leakage	0	0	3
Profit at $2\frac{1}{2}$ per cent. on the c.i.f.	0	0	10
Storage	0	3	0
Landing and installation	0	1	6
Duty	1	4	0
	<hr/>		
	3	10	7

This price is the price of superior kerosene. The price of inferior kerosene, therefore, is Rs. 3-6-7 per unit and the average of the two is Rs. 3-7-11.

34. As has been stated in paragraph 17, the average prices at which foreign kerosene was sold in India during the worst period of the war were Rs. 4-13-3 for superior and Rs. 4-8-1 for superior and inferior combined. If, therefore, Rs. 3-10-7 and Rs. 3-7-11 are taken to represent respectively the true world parity prices of superior and superior and inferior combined, it is evident not only that there has never been any dumping but also that foreign kerosene has been sold well above world parity prices. It will also be seen that the 'losses' alleged to have been incurred as a result of the rate war have been grossly exaggerated. Taking the whole period together no loss has been proved. On the contrary, the Companies have been left with a substantial, though a diminishing, amount of profit. According to this view of the case any examination of the question whether it is in the national interest that protection against dumping should be given is irrelevant.

35. It is not necessary nor, without a fuller and more public examination of costs, is it possible for me to express any opinion in this enquiry as to whether the prices at present realized for kerosene are remunerative. It is not inconceivable that even if the realized prices are well below world parity, they may still be profitable. It is equally conceivable that they may be distinctly unprofitable even though they might be very much above world parity. Kerosene, again, represents only about half the production of each Company. The other half has not been affected by the rate war. On the whole, therefore, the position of the industry may not be seriously affected if the rate war is confined to kerosene and becomes no worse and if the prices of the remainder of the products have not, owing to other causes, become unremunerative. If the business has, on the whole, become unprofitable, it is for the indigenous industry to take such steps as may be necessary to ask for an enquiry in the ordinary way for investigating the question whether protection should be granted. Though I believe I have taken a completely unprejudiced view of the evidence presented to me, there may still be some apprehension in the minds of the Oil Companies that having expressed some opinions in this enquiry, I might be prejudiced against them in subsequent proceedings and that they might not have, for that reason, a fair hearing. I should regard such apprehension as quite reasonable, and I would suggest, if any application for a further enquiry is entertained by the Government of India whilst I am still President of this Board, that I should not be asked to undertake it.

36. Before quitting the subject of kerosene I would like to discuss one or two points which are of considerable public importance.

In support of its application for protection the indigenous industry has claimed that the poor consumer of kerosene has for many years past benefited by what is known as the Kerosene Pool's maximum price policy which has made it possible for him to purchase his inferior kerosene at a cheaper price than would otherwise be the case. In its letter of the 14th April the Burmah Oil Company stated:—

“ To arrive at the estimation of the benefit which this arrangement has conferred upon the poorer Indian consumer would require lengthy research and complicated calculation, but at the Annual General Meeting of the Burmah Oil Company held in June, 1923, the Chairman stated that since June, 1919 (when the arrangement came into force) up to that time the saving which it had enabled India to make in her kerosene bill amounted to over £22,000,000 and it is therefore probably correct to state that, up to the present date, the benefit to the Indian consumer is represented by a sum not far, if at all, short of £50,000,000.”

Statements to this effect have been continuously repeated by the Burmah Oil Company and apparently accepted not only by certain sections of public opinion but even by the Government of India, as appears from the proceedings of the Council of State dated the 5th March, 1923. It is, therefore, necessary now to examine in the light of such information as we have how far this claim of the industry is borne out by recent facts.

37. For illustrative purposes I shall take the Pool's selling prices during the first half of 1927, prior to the rate war, and the equivalent of American parity prices at Indian ports about the same time. The Pool's selling price ex main installation of superior kerosene was Rs. 5-12-0 and of inferior kerosene Rs. 4-6-0 per unit of 8 gallons. American parity for that period was, as stated in paragraph 14, as follows:—

	Rs.	A.	P.
Superior kerosene	4	6	4
Inferior kerosene	4	2	4
Average of the two	4	3	8

The Pool's contribution prices for this period were as follows:—

January to June, 1927.

	Rs.	A.	P.
Asiatic Petroleum Company imported superior .	5	13	0
Asiatic Petroleum Company imported inferior .	5	8	0
Asiatic Petroleum Company average	5	10	6
Indigenous superior	5	8	0
Indigenous inferior	4	3	8
Indigenous average	4	11	1
Imported and indigenous average	4	14	3

38. The price paid by the Pool to the Asiatic Petroleum Company for its superior kerosene was Rs. 5-13-0 which is Rs. 1-6-8 in excess of American parity. The price paid to the indigenous industry for its superior kerosene was in excess of American parity by Rs. 1-1-8 per unit and the average price paid for the indigenous superior and inferior combined was 7 annas 5 pies per unit in excess of average American parity. It will thus be seen that so far as superior kerosene was concerned, the price that the Pool got, *viz.*, Rs. 5-12-10, was in excess of the American parity by Rs. 1-5-8 per unit. It will also be observed that the price charged to the consumer of inferior kerosene, *viz.*, Rs. 4-6-0 per unit, was 3 annas 8 pies higher than its American parity price, and only just below the American parity price of superior kerosene. The average price received by the Asiatic Petroleum Company for inferior kerosene was Rs. 5-8-0 per unit, that is to say Rs. 1-5-8 higher than its American parity price and Rs. 1-1-8 higher than the American parity price of superior kerosene. In this arrangement it will be noticed that the Asiatic Petroleum Company stands to gain most by being a member of the Pool, for it gets on an average for its superior and inferior oil a price of Rs. 5-10-6 per unit which is in excess of the average American parity price by Rs. 1-6-10. The average price paid by the Pool for all inferior and superior kerosene both imported and indigenous was Rs. 4-14-3 per unit, that is to say 7 annas 11 pies in excess of the parity price for superior kerosene. The average price paid by the Pool for indigenous superior and inferior, *viz.*, Rs. 4-11-1, was in excess of the American parity price for superior by 4 annas 9 pies, and of the average for superior and inferior by 7 annas 5 pies per unit.

Claim not established as regards first half of 1927.

39. The figures given in paragraph 38 though, as I have said, only illustrative, hardly bear out the indigenous industry's claim that the poor consumer of kerosene has benefited by the existence of the Pool. It will be seen that the Burmah Oil Company has greatly over-estimated the benefit derived by the consumer from the annual contribution of 195,000 tons of what is known as low priced kerosene contributed to the Pool at a maximum price of Rs. 3-6-0 per unit. The fact is that the Pool's inferior kerosene rarely, if ever, sold much below American parity prices, and any sacrifice made by the Pool in the interest of the consumer of the inferior oil was recovered many times over from the consumer of superior oil. On the figures given above it is clear that during this period the consumer of inferior kerosene so far from receiving his oil as claimed at a figure well below American parity actually paid 3 annas 8 pies per unit more than the equivalent of American parity for this class of oil, while the consumer of superior oil had to pay Rs. 1-5-8 per unit above American parity. The nett result was that during the first six months of 1927 India had to pay on an average 10 annas 7 pies per unit more than the equivalent at Indian ports of American parity. The amount by which the receipts of the various Companies exceeded those realizable on the basis of

Extra burden on consumer.

American parity prices for the period January—June, 1927, is shown below:—

Tables to show the amount by which the receipts of the Oil Companies (indigenous and foreign) from the sale of kerosene exceeded those realisable on the basis of American parity during the period January to June, 1927.

	Units.	Price realized.	American parity.	Difference.	Excess.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.
Pool—					
Foreign oil (i.e., Asiatic Petroleum Company).	2,276,753	5 10 6	4 3 8	1 6 10	32,58,162
Indigenous oil	9,000,034	4 11 1	4 3 8	0 7 5	41,92,216
Combined	11,276,787	4 14 3	4 3 8	0 10 7	74,51,701
Burmah Oil Company . .	7,291,632	4 9 7	4 3 8	0 5 11	27,02,279
British Burmah Petroleum Company.	1,073,982	5 1 10	4 3 8	0 14 2	9,50,366
Assam Oil Company . .	634,420	5 1 3	4 3 8	0 13 7	5,39,320
Indo-Burma Petroleum Company.	581,567	4 13 6	4 3 8	0 9 10	3,57,431
Standard Oil Company . .	3,970,544	5 12 0	4 6 4	1 5 8	53,76,910

Pool, Indo-Burma Petroleum Company and Standard Oil Company of New York Rs. 1,31,86,042

40. I do not wish to suggest that the consumer has always been treated by the indigenous industry in the same way as during the first half of 1927. So far as this period is concerned, however, there is little room for doubt that the indigenous industry has failed to establish its claim that the consumer has in fact benefited. As regards earlier periods owing to the difficulty of proving precisely the American f.o.b. Gulf prices, the rates of freights applicable and the fluctuations in exchange it is not possible upon the materials now available to examine in detail the Pool's claim. Whatever the f.o.b. Gulf prices and the freights, two facts have been established with reasonable accuracy which suggest that the equivalent of American parity at Indian ports upon which the Pool's selling prices were based was higher than was justified. A reference to the Table given in paragraph 7 will show that the f.o.b. Gulf price taken into account by the Pool was as a rule higher than the prices given by the Petroleum Times and the Standard Oil Company. It is impossible to make a precise estimate of the effect of the higher rates taken into account by the Pool, but when it is recollected that a difference of even half a cent per American gallon will mean to the consumer a sum of nearly half a crore of rupees, it is easy to perceive the nature of the effect on the profits of the Pool. Further, the profit charged on the c.i.f. price has always been 10 per cent. whereas it should not have exceeded $2\frac{1}{2}$ per cent. This factor alone made a difference of 3 to 4

annas a unit, increasing the burden on the consumer by between 50 and 75 lakhs of rupees a year on the total consumption of indigenous and imported kerosene of about 30 million units. The share of the indigenous industry in this extra profit would approximately amount to 35 lakhs of rupees per annum.

41. Before the rate war and until very recently, the difference between the prices of superior and inferior kerosene was kept at Rs. 1-6-0 per unit. One of the principal objects of this arrangement, it is said, was to make the price of inferior kerosene so unattractive for the foreign competitor as to eliminate competition in respect of that quality of oil and so secure permanently about half the kerosene market for the Pool. It has been claimed on behalf of the Asiatic Petroleum Company that by agreeing to this arrangement it has helped the indigenous industry. As I have pointed out already, the Asiatic Petroleum Company does not contribute any of the low priced kerosene, and obtains for the whole of its supplies a price very little, if at all, below the American parity price as calculated for the purpose of the Pool by the Pool. It is very doubtful indeed whether the actual consumer of the Pool's inferior oil derives any substantial advantage from the price of the inferior kerosene being fixed by the Pool so far below that of the superior. It is said that the consumer of inferior kerosene pays no attention to the quality of his oil; his only concern is to obtain the cheapest oil. It is possible for the middleman to take advantage of this and knowing that his customer's choice is limited to superior or inferior oil to demand for the latter a price only four or perhaps six annas a unit less than that of the superior. It is quite probable that it is the middleman and not the consumer who gains by the present high differential between the two classes of oil. In the Steel industry we actually found that when the difference in the price of Continental and British steel was very high, the former was sold by the middleman at a price far in excess of its import price, but slightly below the price of the better quality British steel. It is, therefore, not impossible that the same thing is to a very large extent happening in the oil trade. Incidentally, the facility offered in this way to the middleman towards extra profit may be an inducement to him to sell the Pool oil in preference to that of the Standard Oil Company which does not sell any inferior oil and for that reason has no additional inducement to offer to the middleman. It is stated in evidence that each middleman who gets inferior kerosene oil to sell has also to sell certain quantities of superior oil at the higher price apparently in competition against the Standard Oil Company. The profits of the middleman are not necessarily confined to the consumer of poor oil. Owing to the difference in the prices of the two kinds of oil it is possible for the middleman to mix white inferior oil with the yellow inferior oil and sell the mixture as an oil of superior grade. In this way also, therefore, both classes of consumers are likely to suffer by the high differential

maintained by the Pool. In the Straits Settlements the differential is said to be between 2 annas and 4 annas and it is not unlikely that if the differential in India were reduced appreciably, if not to the same extent as in the Straits Settlements, the price of the inferior oil would not necessarily be raised so far as the poor consumer is concerned, whilst it might be possible for that reason to reduce the price of the superior kerosene oil. If this course was adopted the losses due to the rate war might also be substantially reduced.

CHAPTER V.

Petrol.

42. I have yet to investigate the question whether there is any likelihood of the rate war extending to petrol. The answer to this question depends very largely upon the ability of the indigenous industry to meet the demand for petrol. It is necessary, therefore, to examine both the indigenous resources and the demands of the country for various petroleum products and to see how far these demands can be met from the existing resources.

43. A reference to Appendix III shows that except for a slight rise in 1921 the production of crude oil in Burma has steadily declined since 1919. In 1919 the production in Burma stood at 293 million gallons. By 1926 it had declined by 43 million gallons to about 250 million gallons, a decrease of 14 per cent. Fortunately, however, during the same period the production in India increased from about 12 to 30 million gallons and for the whole of Burma and India the reduction in output was only from 305 to 280 million gallons or about 8 per cent. In spite of the decline in the production of crude, as a result of improved refinery practice and the use of imported oil as fuel instead of the indigenous crude, there has been a steady increase in the output of refined products. But even so the indigenous supply has been inadequate to keep pace with the increase in the demand. The total imports which in 1920-21 stood at 123 million had risen by 103 million gallons to 226 million gallons in 1927-28, or over 80 per cent. The total demand of the country for petroleum products (*vide* Appendix IV) which in 1920 amounted to 279 millions increased in 1927 by 154 million gallons to 433 million gallons, or by about 55 per cent. The main increases were as follows:—

Increase in the demand for petroleum products in India.

	1920 gallons in millions.	1927 gallons in millions.	Increase gallons in millions.	Percentage.
Kerosene	184	244	60	33
Petrol	13	47	34	261
Fuel oil	51	104	50	92
Lubricating oil	11	16	5	45
Batching oil	11	16	5	45

44. It will be seen that the consumption of petrol in 1927 was more than three times what it was in 1920. Between 1920 and 1924 on an average 20 million gallons, or nearly half the production was exported to foreign countries. In order to meet the increasing demand it was necessary to curtail the exports till by 1927 these had dwindled to less than 4,000 gallons. Since 1925 the demand has increased by 10 million gallons a year. It is obvious that unless there is an increase in the output of crude, even if allowance is made for the possibility of a further increase in the supply as the result of improved refinery methods, the supply of petrol will be unequal to the demand before long. If the demand continues to increase in the same proportion as in the last two years, the shortage of petrol appears to me to be almost imminent. This shortage can only be averted by a reduction in the proportion of other petroleum products for which the demand is already greater than the local supply, and it is unlikely that any such reduction will be made as in all probability it would have to be made by the sacrifice of a part of a market which in normal conditions is more lucrative than the petrol market.

45. I am unable to make any more definite statement as regards petrol than that there will be before long a shortage which may lead to a rate war between the Standard Oil Company and the Royal Dutch Shell Group working in conjunction with the Burmah Oil Company and the Anglo Persian Oil Company as the Burma Shell Oil Storage and Distributing Company of India, Limited, for the capture of the additional petrol market. According to the statements made by the Burmah Oil Company and the indigenous group there will be no shortage of petrol for two years. The Standard Oil Company has also stated that it will not be in a position to import any petrol until its installations have been constructed and that it will take about two years to complete them. If these statements are accepted as correct, there will be no rate war for two years. But no one can prevent an earlier rate war if two powerful belligerents are bent on plunging into it, and I refrain from making any prophecy one way or the other. Until we know what form the rate war will take when it comes, it is impossible to make any proposals which may serve a practical purpose and for that reason I do not think it necessary to make any.

CHAPTER VI.

Exorbitant prices in India demand further exploration of subject.

46. Though perhaps outside the immediate purpose of the enquiry, I think it my duty to report to the Government some important facts which have a vital bearing on the national interest. There is evidence which suggests *prima facie* that petroleum products are being sold in India at exorbitant prices and the consumer is being mulcted to the tune of several crores of rupees per annum both by the indigenous industry and the importers of foreign petroleum products. In Chapter IV I have already discussed how the burden on the consumer of kerosene has been increased to the extent of more than Rs. 2½ crores per annum* by the sale of kerosene at a price far in excess of American parity. There is no reason to suppose that the consumer of other petroleum products escapes with a lighter toll. The total extra burden may not therefore be very much short of Rs. 5 crores per annum.

47. I have arrived at the same conclusion by another and different method. Since the dissolution decree against the Standard Oil

Company the production of crude has been a competitive enterprise all over the world. The Oil Trusts however have a monopoly of the refining and marketing which enables

Margin between prices of crude and of finished products.

them to exact from the consumer of the refined products prices higher than those economically justifiable. The difference between the cost of crude oil and the price at which the refined products are sold represents the sum of the refinery costs and the refiner's profits. If the difference between these two figures, the cost of crude and the *ex-refinery* price of the refined products is very much larger in India than in America, the natural inference is that unless the refinery costs in the former country are considerably heavier, the refiner's profit is very much greater and the consumer is being exploited. During the course of the oral evidence I asked whether for the purpose of comparison I might assume that the refinery costs in both countries were about the same and it was generally agreed by the representatives of the applicant companies that my proposition was reasonable. Any difference in the refinery costs which might tell against this country would in all probability be more than counterbalanced by the distinctly superior quality of the Burma crude and its higher yield of the more valuable distillates. Any marked difference, therefore, in the margin between the cost of crude and the average price of the refined products in India and America represents the measure of the Indian consumer's exploitation. It was in fact on very similar evidence that the dissolution of the Standard Oil Company was asked for and eventually decreed.

* See paragraph 39.

48. During September, 1927, the average price of mid-Continent crude which we have been told is reasonably comparable with

Burmah crude was in the neighbourhood of \$1.28 per American barrel at well which is approximately equal to 3 cents per gallon. I have not been able to get the weighted average f.o.b. Gulf ports price of the principal refined products. But judging by the percentages of the yield of the four principal products,* viz., petrol, kerosene, lubricating oils and fuel oils, from the mid-Continent crude the higher prices of petrol and lubricating oil will not substantially raise the weighted average above the price of kerosene because of the lower prices of the fuel oils which represent nearly 50 per cent. of the total yield. For illustrative purposes, therefore, the price of kerosene will probably represent the average price of all products. The average f.o.b. price of kerosene was in the neighbourhood of 5.75 cents. The difference between this price and the price of crude is, therefore, 2.75 cents per American gallon or approximately 3.5 cents per Imperial gallon. This is equivalent to 1 anna 6 pies per Imperial gallon.

49. The price of crude in Burma is said to be on an average Rs. 8 per barrel at the well and though in the case of the Burmah

Oil Company on account of its pipe line the cost of transport would be much smaller, one rupee per barrel would be more than ample to cover the average cost of transport from the well to the refinery. I should here explain that if I was making a strict comparison between the costs in America and in India, I should not make any allowance for the cost of transport which in America is borne by the refinery and should therefore be met from the difference between the price of crude and the *ex-refinery* price. The price of the crude delivered at the refinery is about 3 annas 4 pies per gallon. To this 1 anna 6 pies must be added on account of refinery costs. The average price per gallon of petroleum products in India *ex-refinery* should not therefore exceed 4 annas 10 pies. This price should leave to the Indian manufacturer at least as much margin of profit as the American price does to the American manufacturer. If however to be on the safe side even 8 pies per gallon are added to this figure, the *ex-refinery* price becomes 5 annas 6 pies only per gallon. An addition of 8 pies does not appear large but as the production of petroleum products is nearly 240 million gallons a year, this addition would give to the indigenous industry a profit of rupees one core a year in excess of that of the American manufacturer. The realized average price *ex-refinery* for petroleum products in India for the nine months of 1927 preceding the rate war was 7½ annas per gallon. There is evidence therefore that after making a very

* According to one authority percentage recoveries are as follows:—

Petrol	.	.	.	.	.	.	.	.	.	30.9
Kerosene	.	.	.	.	.	.	.	.	.	9.4
Lubricating oil	.	.	.	.	.	.	.	.	.	4.4
Gas and fuel oil	.	.	.	.	.	.	.	.	.	49.4

liberal allowance for profits a sum of 2 annas per gallon is taken from the pocket of the consumer.

50. If the average production of India is taken at 240 million gallons this is the equivalent of Rs. 3 crores per annum and furnishes some explanation of the high dividends paid by the Indian oil companies compared with the American.* This however does not represent the total burden on the consumer. It may not be incorrectly assumed that there is the same difference in the price of the imported petroleum products. The total imports may be estimated at about 200 million gallons on which the additional burden is Rs. $2\frac{1}{2}$ crores. The total additional burden therefore on the consumer may be estimated at Rs. $5\frac{1}{2}$ crores per annum.

51. The reasons why the prices of petroleum products are so high are not far to seek. Oil business in India, as in many other countries, is in the hands of powerful monopolies which control both the refining and the marketing of petroleum products. Before the rate war, the monopoly lay with the Pool and the Standard Oil Company working under a tacit understanding with the Pool. Since, the war a new Company called the Burma Shell Oil Storage and Distributing Company of India, Limited, has been constituted of which the Burmah Oil Company, the Asiatic Petroleum Company and Anglo-Persian Oil Company are members. The object of this Company is to capture all the business formerly done by the Standard Oil Company and thus eliminate whatever possibility of competition existed before. If this Company succeeds in its object, competition will disappear even in respect of foreign imports which are necessary so long as the shortage in the domestic supply continues. In the absence of competition the prices of all petroleum products will be governed by the prices fixed by this monopoly. If the rate war results in a stalemate or in a patched up peace, the position will be as before, the monopoly being divided between the Standard Oil Company and the Burma Shell Group.

* The average nett returns of American companies were as follows:—

	Per cent.
1913	18.1
1914	7.6
1915	11.7
1916	19.9
1917	16.2
1918	14.8
1919	10.7
1920	14.7
1921	4.3
1922	7.2
1923	5.6
1924	7.2
1925	10.8

52. If the prices of petroleum products are to be lowered in India, it is necessary to consider how this monopoly can be broken and competitive conditions created. My suggestion is that the best way in which the existing monopoly can be broken and competitive conditions established is by the

Main remedy : introduction of competitive conditions by import of crude.

encouragement of the import of crude and the opening of refineries to work this crude in or near Bombay. As I have already noted in paragraph 47, the production of crude oil especially in America is still an essentially competitive enterprise, whereas the existence of big Oil Trusts working in interconnection has very largely eliminated competition from refining and marketing. Crude oil as the essential raw material of refined petroleum products is very different from other raw materials in that there is little or no waste in the process of manufacture and therefore its importation in the raw does not involve any extra freight charges over and above those which would have to be incurred in the import of the refined products. In fact, considering that there are some products on which freight charges are higher than on the crude, if crude oil is imported instead of the refined products, the total amount of freight payable per ton would not necessarily be more than the freight payable on its different constituents imported in the refined state. Though I asked for figures bearing on this point, the indigenous companies were unable to supply them and therefore I am not in a position to say precisely what the difference might be. Nearly every country in the world to-day has undertaken the refining of imported crude oil. In Great Britain nearly 30 per cent. of its requirements are met by the refining of imported crude oil. In France recently a law has been passed in order to revive the refining business and to deal with foreign monopolies which had raised the price of refined products in the country. In Spain recently a State monopoly has been constituted. Japan also refines a large percentage of imported crude oil. In Australia also, by arrangement with the Anglo-Persian Oil Company, crude oil is being refined. It stands to reason that all these countries would not have deliberately established refineries if it was cheaper to import the refined products, and I see no reason why an up to date refinery in Bombay should not be able to supply the demands of that part of India at prices below those up till recently charged by the Pool and followed by foreign importers. The imports of petroleum products into Bombay from Burma alone amount to about 40 million gallons a year, and foreign imports about 60 million gallons more. The combined throughput of the British Burmah Petroleum Company, the Indo-Burma Petroleum Company, the Attock Oil Company and the Assam Oil Company last year amounted to about 60 million gallons. An annual demand of 100 million gallons should be more than sufficient to justify the erection of an up-to-date refinery in or near Bombay.

53. Further, two important branches of the oil business to-day, *viz.*, refining and marketing, are almost entirely in the hands of companies registered outside India. A substantial part of this business can be converted into a genuine Indian enterprise

Encouragement of genuine Indian industry.

if refineries are established in India and oil is marketed by Indian companies with Rupee capital. It might be possible to encourage the establishment of refineries in India by Rupee companies, if the present import duty on crude oil of 2 annas 6 pies per gallon was retained, but was remitted in favour of a genuine Rupee company subject of course to the usual conditions on which a bounty is granted, and such other control as the Government may impose. No doubt if this business was undertaken by any company outside the big Oil Trusts, attempts would be made by unfair competition to bring it to grief, but it should not be impossible for the Government to afford protection against such competition by varying the import and the excise duties in force for the time being on refined products or in some other effective way.

54. There is one further advantage connected with the refining of imported crude oil. The Burma crude oil is of a very superior grade and is therefore expensive. It may not also be suitable for the kind of refined products which a particular market may require. For instance, in Bombay there is a very large demand for petrol and kerosene. The demand for fuel oil is even larger. Burma crude is too expensive to be used for the extraction of fuel oil on a large scale. It would be possible for a refinery in Bombay to select those grades of crude oil which would give it the largest quantities of the particular kind of products required in its market. In this way by the elimination of those refined products which are not required and consequently may have to be exported at unremunerative rates, the prices of those products which are required may considerably be reduced.

55. An alternative course is that the Government should in the last resort devise means to control prices. Arrangements should be made to enable the Indian consumer to purchase the refined petroleum products in the cheapest markets. No doubt this might mean a certain amount of interference with private enterprise but that in itself should not debar Government from taking action if it results in the saving of crores of rupees to the consumer. There should be no objection to the Government recognizing a marketing Company constituted on a Rupee basis in India to which the work of importing the surplus requirements of India could be entrusted. It would simply take the place, as a controlled marketing organization, of the uncontrolled Oil Trust which has acquired a monopoly so prejudicial to the national interests.

56. In discussing the various points referred to in this Chapter, I do not wish it to be supposed that I am making any definite proposals nor do I claim for the figures given by me that degree of accuracy which would be necessary if I were recommending the adoption of any definite action. Such figures as I have used have been used merely for illustrative purposes. All that I wish to suggest is that there is

evidence which points to the existence of conditions in connection with the oil business in India which might make a further exploration of the subject advisable in the national interest. The main object in view should be to bring about a reduction in the price of petroleum products to a reasonably economic level consistently with the well-being of the existing indigenous industry.

CHAPTER VII.

Summary of Conclusions and Recommendations.

Summary of conclusions and recommendations.

57. My conclusions and recommendations are summarized below:—

1. The real causes of the rate war were very different from those alleged by the applicants.

2. The rate war was commenced by the Asiatic Petroleum Company, a subsidiary of the Royal Dutch Shell Group with the knowledge and active co-operation of the Burmah Oil Company and its Indian associate Companies, part of the consideration for the entry of the latter group into the war being an agreement by the Asiatic Petroleum Company to compensate them against losses arising out of the rate war.

3. These and other material facts were not brought to the notice of the Government of India and disclosed a lack of candour amounting almost to deliberate *mala fides* which in the interest of public discipline might have justified a summary dismissal of the application.

4. The expression “ world parity ” price as used by the applicant Companies means the f.o.b. price of kerosene at the Mexican Gulf ports. Its equivalent at Indian ports is that price *plus* the charges incidental to importation including freight, insurance, importer's profit at 10 per cent. on the c.i.f. price, landing, storage and the revenue Customs duty.

5. There is no satisfactory evidence either as regards f.o.b. Gulf prices or freights from Gulf ports to India and consequently no reliable estimate of the equivalent of American parity at Indian ports is possible.

6. With the exception of about 5 per cent. sold directly by the Indo-Burma Petroleum Company, the whole of the indigenous kerosene was formerly sold by the Pool and is now sold by the Burmah Shell Oil Storage and Distributing Company of India, Limited. The latter also sells about 25 per cent. of the imported kerosene. The prices both of the indigenous and the foreign oil marketed by this Company has been deliberately kept lower than economic considerations alone would have justified and are therefore unreal.

7. Accepting the figures supplied by the applicant Companies, except as regards profit which item I have reduced from 10 to 2½ per cent. the equivalent of American parity at Indian ports between January, 1927, and March, 1928, was Rs. 4-6-4 per unit for superior and Rs. 4-3-8 for the average of the superior and inferior kerosene, and since April, 1928, Rs. 4-9-9 and Rs. 4-7-1 per unit respectively.

8. The average prices of imported kerosene from September, 1927 to date have not fallen below American parity and no dumping, that

is, the sale of imported kerosene below American parity, has therefore been established.

9. The claim of the indigenous industry to sell kerosene at prices equivalent to American parity cannot be admitted without conceding to the Oil Trusts a perpetual monopoly.

10. The real equivalent of world parity at Indian ports is the price at which under competitive conditions kerosene is or can be imported on a commercial scale. Russian oil has been so imported and landed in India duty paid at Rs. 3-10-7 per unit for superior and Rs. 3-7-11 for superior and inferior combined. On these figures the indigenous industry has been realizing prices very considerably above world parity.

11. The three principal applicants for protection are the British Burmah Petroleum Company, the Indo-Burma Petroleum Company and the Attock Oil Company. The Attock Oil Company's realized prices have always been higher than American parity and that Company has suffered no injury by the rate war. Between January, 1927, and March, 1928, the British Burmah Petroleum Company received Rs. 16,39,329 and the Indo-Burma Petroleum Company Rs. 3,09,376 in excess of the amounts realizable on the basis of American parity and any diminution of their profits resulting subsequent to that period from the rate war will not affect their financial position for 18 months and 6 months respectively.

12. If the prices now current for all petroleum products are unremunerative, the industry should take such steps as may be necessary to ask for an enquiry in the ordinary way for the purpose of investigating the question whether it should be granted protection.

13. There is evidence that during the six months between January and July, 1927, an additional burden of more than Rs. 1½ crores was thrown on the consumer by the indigenous industry and the foreign importers by the selling prices being in excess of American parity.

14. The claim of the indigenous industry that the poor consumer has benefited by the Pool's maximum price policy has not been established.

15. There is evidence which suggests that all petroleum products are being sold in India at exorbitant prices owing to oil business being in the hands of Oil Trusts, and that the consumer has to pay a sum which may amount to Rs. 5 crores per annum in excess of economic prices.

16. It is in the national interest that the subject should be further explored with the object of bringing about a reduction in the exorbitant prices of petroleum products. The importation of crude oil and the erection of refineries by Rupee Companies particularly in Bombay or the control by Government of prices is suggested as a possible line of action which might result in the lowering of prices.

17. A shortage of petrol may lead to a rate war though it is difficult to predict its date or the form it may take.

18. No case has been established for the grant of protection in any form either as regards kerosene or petrol and no recommendations therefore are made.

P. P. GINWALA,
President.

23rd June 1928.

R. L. WALKER,
Secretary,

23rd June 1928.

Appendices.

APPENDIX No. I.

Table showing imports of Kerosene oil into India by Standard Oil Company of New York, from 1913 to 1927.

(Expressed in units of 8 imperial gallons.)

Year.	Standard Oil Company's total trade.	Grand total trade.	Standard Oil Company per cent. of total.
1913	6,036,290	24,419,155	24.7
1914	6,085,745	21,350,205	25.0
1915	5,915,935	23,408,705	25.3
1916	5,197,078	21,088,725	24.6
1917	5,380,163	20,213,798	26.6
1918	1,935,379	17,667,369	10.9
1919	3,452,546	19,384,466	17.8
1920	4,849,565	21,670,956	22.4
1921	5,247,831	21,907,749	23.9
1922	5,702,561	24,729,334	23.1
1923	6,407,346	26,360,501	24.3
1924	7,226,564	28,041,348	25.8
1925	7,541,634	29,301,955	25.7
1926	7,772,794	29,785,260	26.1
1927	7,941,088	31,051,277	25.6

N. B.—The above table has been prepared by the Standard Oil Company of New York to show their share of the Indian trade in kerosene.

APPENDIX No. II.

Table showing the cuts in price made in the bulk oil price ex main Indian Ocean installations by the Standard Oil Company of New York (Elephant Brand).

(Prepared from details supplied by the Standard Oil Company of New York in their letter of 4th May, 1928.)

Date.	Bombay.	Madras.	Calcutta.	Karachi.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1st January, 1927 . .	6 3 6	6 3 6	6 3 6	6 3 6
23rd September, 1927 . .	5 3 6	..	..	..
24th September, 1927 .	4 15 6	..	..	.
7th October, 1927 . .	4 7 6	..	..	..
8th October, 1927 . .	..	..	4 15 6	..
19th October, 1927 . .	..	4 15 6	..	4 15 6
20th October, 1927 . .	..	4 7 6	..	4 7 6*
28th October, 1927 . .	..	..	..	4 3 6*
7th November, 1927 . .	4 3 6	..	..	..
21st November, 1927 . .	3 11 6	..	..	..
30th November, 1927 . .	..	3 11 6	..	..
2nd December, 1927 . .	..	..	..	3 11 6†
4th May, 1928 . .	4 11 6	4 15 6	4 15 6	4 15 6

* Authorised but not made in full throughout the whole area.

† For Cutch only.

APPENDIX No. III.
Table showing total production of crude oil in India and Burma from 1916 to 1926.
 (Compiled from figures supplied by the Geological Survey of India, Rangoon Office.)

Provinces.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925 .	1926.	1927.
Burma . .	201,769,083	272,793,191	274,894,558	293,743,807	279,707,170	296,092,057	281,759,169	271,405,947	270,213,003	262,828,930	250,040,471	245,407,564
Assam . .	5,236,890	9,344,815	10,999,648	11,788,679	13,358,172	9,530,934	9,382,641	11,004,096	12,975,249	18,730,412	24,098,535	.. *
Punjab . .	183,814	619,517	750,807	114,330	51,492	60,236	7,362,313	11,803,010	11,383,440	8,047,500	6,230,320	.. *
TOTAL .	297,189,787	282,750,523	286,585,011	305,651,816	293,116,834	305,683,227	298,504,125	294,215,053	294,571,692	289,606,542	280,369,326	*

* Figures not yet available.

APPENDIX No. IV.

Table to show the Approximate Demand for petroleum products in India during the past eight years 1920 to 1927.

	KEROSENE.					Fuel Oil.	Lubricating Oil.	Batching Oil.	Wax.	TOTAL.
	Superior.	Inferior.	Combined Total.	Petrol.						
1920.										
Total Indigenous Production	32,238,715	88,717,234	121,000,949	35,124,323	11,487,907	3,149,700	8,149,700	3,904,750	9,894,108	184,561,737
Total Imports	..	..	63,599,160	3,735	42,781,627	8,536,321	8,536,321	7,472,553	1,960	122,195,386
TOTAL	..	..	184,600,109	35,128,058	54,269,534	11,486,021	11,486,021	11,377,283	9,896,068	306,757,073
Less Exports	..	..	21,240,678	13,887,380	54,269,534	11,486,021	11,486,021	11,377,283	6,466,040	27,706,718
Approximate Demand	..	..	184,600,109	13,887,380	54,269,534	11,486,021	11,486,021	11,377,283	3,430,028	279,050,355
1921.										
Total Indigenous Production	42,640,397	87,573,467	130,213,864	37,884,031	5,228,219	3,567,300	3,567,300	3,418,083	9,792,833	190,104,330
Total Imports	..	..	42,863,773	2,539	50,186,103	10,164,023	10,164,023	8,020,848	13,440	111,250,818
TOTAL	..	..	173,077,639	37,886,570	55,414,412	13,731,323	13,731,323	11,438,931	9,806,273	301,355,148
Less Exports	..	..	19,516,398	18,370,172	55,414,412	13,731,323	13,731,323	11,438,931	8,696,240	28,212,638
Approximate Demand	..	..	173,077,639	18,370,172	55,414,412	13,731,323	13,731,323	11,438,931	1,110,093	273,142,510
1922.										
Total Indigenous Production	43,473,539	32,176,615	75,649,144	40,831,357	4,733,947	3,042,382	3,042,382	3,904,041	9,540,309	137,201,180
Total Imports	..	..	53,850,812	815	61,531,885	8,551,947	8,551,947	10,906,394	8,400	134,860,253
TOTAL	..	..	129,499,956	40,832,172	66,265,832	11,594,329	11,594,329	14,810,435	9,548,709	272,051,433
Less Exports	..	..	19,760,576	19,760,576	66,265,832	11,594,329	11,594,329	14,810,435	7,738,080	27,498,656
Approximate Demand	..	..	129,499,956	20,571,596	66,265,832	11,594,329	11,594,329	14,810,435	1,810,629	244,552,777
1923.										
Total Indigenous Production	49,671,920	108,543,315	158,215,235	39,506,463	2,837,928	4,585,546	4,585,546	3,802,042	10,282,352	219,179,565
Total Imports	..	..	64,063,637	1,494	72,085,034	8,352,826	8,352,826	5,707,893	31,360	150,192,244
TOTAL	..	..	222,278,872	39,507,956	74,872,962	12,938,372	12,938,372	9,509,935	10,283,712	369,371,809

Less Exports	..	..	..	..	..	18,983,865	74,872,962	12,936,372	9,506,935	6,877,920	25,801,785
Approximate Demand	..	..	..	..	..	20,567,091				3,385,792	343,570,024
1924.											
Total Indigenous Production	..	..	..	..	49,237,871	108,574,887	157,802,758	7,485,312	4,740,686	10,753,917	225,964,555
Total Imports	..	..	..	..	..	71,807,575	89,152,952	9,843,378	9,132,077	115,440	180,056,500
TOTAL	..	..	..	..	..	229,610,333	229,610,333	15,120,042	13,872,763	10,869,557	406,021,055
Less Exports	..	..	..	..	..	22,262,535	96,638,764	15,120,042	13,872,763	8,233,960	30,496,545
Approximate Demand	..	..	..	..	..	17,646,011	96,638,764	15,120,042	13,872,763	2,635,597	375,524,570
1925.											
Total Indigenous Production	..	..	..	..	51,752,603	106,717,927	158,470,530	6,508,497	3,977,986	11,714,596	225,816,516
Total Imports	..	..	..	..	..	70,749,064	86,599,766	11,161,082	11,739,728	61,280	180,336,922
TOTAL	..	..	..	..	..	229,219,594	229,219,594	16,554,046	15,717,714	11,795,876	406,153,438
Less Exports	..	..	..	..	..	12,679,032	93,106,263	16,554,046	15,717,714	8,818,040	21,497,072
Approximate Demand	..	..	..	..	..	27,080,913	93,106,263	16,554,046	15,717,714	2,977,536	384,656,366
1926.											
Total Indigenous Production	..	..	..	..	56,099,939	109,282,939	166,292,898	5,481,278	1,453,998	13,903,781	229,574,341
Total Imports	..	..	..	..	..	69,311,236	94,592,978	9,977,235	12,230,360	244,440	196,358,867
TOTAL	..	..	..	..	..	235,594,134	235,594,134	15,458,503	13,684,298	14,148,221	415,933,208
Less Exports	..	..	..	..	..	2,990,780	97,174,832	15,458,503	13,684,298	11,374,440	13,595,230
Approximate Demand	..	..	..	..	..	37,652,440	97,174,832	15,458,503	13,684,298	2,773,761	402,337,988
1927.											
Total Indigenous Production	..	..	..	..	56,873,371	99,959,254	156,732,625	4,486,884	676,883	15,757,416	230,247,518
Total Imports	..	..	..	..	..	88,158,627	111,946	11,397,112	16,094,908	167,440	219,145,569
TOTAL	..	..	..	..	..	244,891,252	244,891,252	16,957,442	16,701,791	15,924,856	446,393,087
Less Exports	..	..	..	..	..	3,844	104,772,420	16,957,442	16,701,791	13,356,000	13,850,844
Approximate Demand	..	..	..	..	..	47,141,482	104,772,420	16,957,442	16,701,791	2,568,856	433,033,243

